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ABSTRACT

This edition of the Organisation for Economic Cooperation and Development's annual compendium of statistical information covers multinational trends in education since 1975 and offers data for the 1987-88 school year. Part A covers trends from 1975 to 1986 in educational systems; numbers of students; participation rates at the various levels of education; enrollment rates at certain key ages; participation of women in the educational system; the private sector; teachers; and expenditures. So as not to overload the compendium, only a few charts for certain countries that are representative of patterns prevailing in others are included. However, tables showing the trend in each Organisation for Economic Cooperation and Development member country are annexed to Part A. Part B deals with six major topics: (1) pupils; (2) teachers; (3) students; (4) enrollment rates per year of age (except for the years that correspond to compulsory education); (5) qualifications; (6) expenditure. The tables refer only to those countries which provided data for 1987-88. The annex to Part B includes a table showing the age at which compulsory education begins and ends, its duration, the months in which the school year starts and ends, and a diagram of each member country's education system that uses the terminology of the country in question. (RH)

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PARIS 1990

Education in OECD Countries 1987-88

A COMPENDIUM OF STATISTICAL INFORMATION

1990 SPECIAL EDITION

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971) and New Zealand (29th May 1973).

The Socialist Federal Republic of Yugoslavia takes part in some of the work of the OECD (agreement of 28th October 1961).

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DANS LES PAYS DE L'OCDE
1987-88

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The OECD produces this compendium each year as part of its analysis of country policies in education and training. It is a response to the Education Committee's request for internationally comparable data covering all education systems, so that any one country can compare itself with the others and, even though institutional structures may be dissimilar, assess common problems more effectively. This year's edition serves two purposes. The first is to provide the November 1990 meeting of the Education Committee at Ministerial Level with a reference document on trends since 1975. The second is its ordinary purpose of carrying on the series, updating previous editions by giving the figures for the school year 1987-88.

The Secretariat used to be assisted and supported in this work by the Working Party on Educational Statistics and Indicators, which was composed of representatives of the national statistical services. Since its dissolution in 1981, that assistance and support have been provided by those members of the Working Party who agreed to act as national correspondents for direct consultation when any problem arises about their country's statistics.

This compendium, published on the responsibility of the Secretary-General of the OECD, has been prepared by Monique Solliliage of the Education and Training Division, with particular help from Pascal Marianna.

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TABLE OF CONTENTS

Présentation 7

A. TRENDS FROM 1975 TO 1986

Overview of salient trends 10

I. PUPILS 12
- I.1. Pre-primary education 12
- I.2. First level and second level-first stage education 15
- I.3. Full-time second level-second stage education 16
- I.4. The different types of second level-second stage education 20

II. STUDENTS 22
- II.1. Total enrolments 22
- II.2. The different levels of third level education 24
- II.3. Part-time students 26

III. POPULATION AGED 3 TO 24 AND POPULATION IN EDUCATION 28

IV. ENROLMENT RATES 32
- IV.1. Age 17 32
- IV.2. Age 19 32
- IV.3. Age 21 34

V. FEMALE PARTICIPATION 36
- V.1. Second level-second stage 36
- V.2. Third level 38

VI. PRIVATE EDUCATION 40
- VI.1. Pre-primary 40
- VI.2. First level and second level-first stage 40
- VI.3. Second level-second stage 40
- VI.4. Full-time second level-second stage vocational/technical 42
- VI.5. Third level 42

VII. SECOND LEVEL-SECOND STAGE QUALIFIED STUDENTS AND NEW ENTRANTS INTO THIRD LEVEL 44
- VII.1. Trend in the numbers qualifying for, and new entrants to, third level 44
- VII.2. Numbers qualifying for, and new entrants to, third level as proportion of an age group 44

VIII. THIRD LEVEL GRADUATES 48
- VIII.1. Level 5 graduates 48
- VIII.2. Level 6 graduates 48
- VIII.3. Level 7 graduates 50

IX. TEACHERS 52
- IX.1. Pre-primary education 52
- IX.2. First level education 52
- IX.3. Second level education 54

X. EXPENDITURE ON EDUCATION 56
- X.1. Expenditure on education as a percentage of Gross Domestic Product 56
- X.2. Total public expenditure and public expenditure on education 56
- X.3. Public expenditure on public education by level of education 58
- X.4. Expenditure per pupil/student as a percentage of per capita Gross Domestic Product 60

ANNEX TO PART A (tables)

I. Pupils . . . 65
II. Students . . . 69
III. School age population and enrolment . . . 72
IV. Enrolment rates . . . 73
V. Female participation . . . 75
VI. Private education . . . 77
VII. Qualifications in second level-second stage and new entrants into third level . . . 79
VIII. Third level qualifications . . . 81
IX. Teachers . . . 84
X. Education expenditures . . . 87

B. DETAILED DATA FOR 1987-88

1. Pupils . . . 93
1.1. Pre-primary . . . 93
1.2. First level and second level-first stage . . . 94
1.3. Second level-second stage . . . 95
1.4. Part-time . . . 96
1.5. Special . . . 96
General Definitions . . . 97

2. Teachers . . . 99
2.1. Pre-primary . . . 99
2.2. First level . . . 99
2.3. Second level-first stage . . . 100
2.4. Second level-second stage general . . . 100
2.5. Second level-second stage vocational/technical . . . 101
2.6. Special . . . 101
General Definitions . . . 102

3. Students . . . 103
3.1. New entrants in third level education . . . 103
3.2. Proportion of the age group concerned entering third level education . . . 104
3.3. Total enrolment in third level education . . . 104
3.4. Enrolment in the different levels of third level education . . . 105
General Definitions . . . 106

4. Enrolment rates . . . 107
4.1. For ages 2-6, in pre-primary education . . . 107
4.2. For ages 15-19 . . . 108
4.3. For ages 20-24 . . . 109

5. Qualifications . . . 111
5.1. Qualifications in second level-first stage education . . . 111
5.2. Qualifications in second level-second stage education . . . 111
5.3. Proportion of the age group concerned obtaining a second level-second stage qualification . . . 112
5.4. Qualifications in third level education . . . 112
5.5. Proportion of the age group concerned obtaining a third level qualification . . . 113
General Definitions . . . 114

6. Expenditure . . . 115
6.1. Total expenditure on education . . . 115
6.2. Public expenditure on education . . . 116
6.3. Public current expenditure, by purpose . . . 117
General Definitions . . . 118

ANNEX TO PART B

Duration of compulsory schooling, duration of the school year . . . 120
Diagrams of education systems . . . 121

PRESENTATION

Previous editions of *Education in OECD Countries – A Compendium of Statistical Information* covered one school year only. This edition differs in being designed, as requested by the Education Committee, to provide a reference paper on trends since 1975 for its November 1990 Meeting at Ministerial Level (Part A) as well as to carry on the series, updating the tables set out in earlier editions by giving data for the school year 1987-88 (Part B), but without any comments or comparisons with the previous year.

Part A covers the trends from 1975 to 1986 in the main components of education systems: pupil and student numbers, participation rates at the various levels of education, enrolment rates at certain key ages, qualifications, female participation, private sector, teachers, expenditures. So as not to overload the compendium, only a few charts are included, for certain countries which are representative of patterns prevailing in others. However, tables are annexed to Part A showing the trend in each Member country. When indices are used it is 1984, for which absolute figures are set out in the Annex tables, which has been selected as the base year, partly because 1975 data are not available for certain countries, but also because it was in 1984 that the annual statistical compendium was first produced, so 1984 has subsequently come to be regarded as the reference year.

The Secretariat extracted the Part A data from country replies to the UNESCO 1975 and 1980 questionnaires and to the joint UNESCO/OECD/SOEC (Statistical Office of the European Communities) questionnaires for 1984 and 1986, then sent them to countries for checking. The names of countries from which no reply was received are given in italics in the tables concerned. Certain countries amended data, including some for recent years. This explains why there may be discrepancies with figures published in earlier editions of the compendium, or with those for 1987-88 given in Part B, the latter being drawn from responses to annual questionnaires designed to yield much more detailed information than that requested for Part A. To ensure consistency in the information, both for 1975 to 1986 and for 1984 to 1987, the 1987 data are omitted in Part A.

Part B as in previous years deals with six major topics, devoting one chapter to each: 1. pupils; 2. teachers; 3. students; 4. enrolment rates per year of age (except for the years that, for most countries, correspond to compulsory education); 5. qualifications; 6. expenditure. Standard definitions, and any different definitions adopted by certain countries on specific items, are presented at the end of each chapter, along with an indication of other data included in the replies to the questionnaire but not incorporated in this compendium.

The tables refer only to those countries which provided data for 1987-88. However, when 1986-87 data were available, they were included in the tables. In some cases this means that there may be some overlap with the data that appeared in the 1986-87 edition.

The annex to Part B includes a table showing the age at which compulsory education begins and finishes, its duration, the months in which the school year starts and finishes and, for each Member country, a diagram of its education system using the terminology and language of the country in question. To facilitate inter-country comparisons, each part of the diagram corresponding to a particular level or type of education is coloured identically.

N.B. This information applies only to the regular national education systems, excluding pupils and students studying abroad and the various training activities for adults or special groups organised outside those systems.

Abbreviations used for the countries in the charts

AUS	Australia	LUX	Luxembourg
OST	Austria	NET	Netherlands
BEL	Belgium	NZL	New Zealand
CAN	Canada	NOR	Norway
DEN	Denmark	POR	Portugal
FIN	Finland	SPA	Spain
FRA	France	SWE	Sweden
GER	Germany	SWI	Switzerland
GRE	Greece	TUR	Turkey
IRE	Ireland	UKM	United Kingdom
ITA	Italy	USA	United States
JPN	Japan	YUG	Yugoslavia

Conventional signs:

– Category not applicable or magnitude nil.
.. Data not available.

A. TRENDS FROM 1975 TO 1986

OVERVIEW OF SALIENT TRENDS

From 1975 to 1986, the sizes of age groups eligible for the various levels of education have had very dissimilar trends and these have affected pupil and student enrolments. In pre-primary education, since the number of pupils declined less or increased more than the 3-5 age group, enrolment rates rose. In first level and second level-first stage, generally corresponding to the compulsory schooling period, numbers followed the 6-15 age group trend, downward in nearly all countries, though more markedly on the whole for first level (6-11 years) than for second level-first stage (12-15 years), for which numbers increased in some countries. It was in first level and second level-first stage that fluctuations were greatest. In second level-second stage, the 16-19 age group tended to increase, and pupil numbers grew more rapidly, resulting in higher enrolment rates. The pattern was fairly similar for third level, where enrolment rates were generally markedly higher. The population in education as a whole declined because of the drop in the potential population in education (aged 3 to 24) but the actual enrolment rates increased.

Whereas in most countries education at the pre-primary, first level and second level-first stage takes the same form for all pupils, this is not true of second level-second stage or third level, where the pattern varies considerably from country to country. In some, a substantial proportion of second level-second stage pupils – as many as two-thirds – are in part-time education, while other countries have no part-time education at these levels, or organise it outside the ordinary education system. In these latter countries, full time vocational/technical education is generally more developed than in the former. There are very few countries in which general education predominates.

In third level education, the position of level 5 (preparing for a higher technician qualification) varies considerably compared with that of level 6 (preparation for a university first degree); level 5 is almost non-existent in a very few countries, but accounts for the highest proportions of students in others. Student numbers in level 7 (leading to a post-graduate degree) are generally low. The proportion of part-time students also varies widely from country to country and from level to level. Some countries have no part-time students at all in some of the levels. Others have as many as 75 per cent, and there are usually more part-timers in level 5 than in level 6.

Structural differences in education systems emerge clearly if one considers first the proportion of part-timers in enrolment rates at age 17, then the proportion of age 19 and age 21 enrollers who are in second level education. In some countries, up to 50 per cent of the age 17 group who are still receiving education are doing so part-time, whereas in other countries they are all in full-time education. For the age 19 group and still more so for the age 21 group, although they may have completed their second level education, up to 90 per cent of 19 year-olds and 50 per cent of 21 year-olds are still pursuing second level in some countries.

Females are over-represented in general education at second level-second stage, as they are in vocational/technical education when part-time education is available. Females are under-represented in part-time education. The female proportion has been rising in all three forms of education but most of all in general education. At third level, females account for some 49 per cent or more of the total enrolments in half the countries. At level 5 they are in the majority in two countries out of three and at level 6 in one country out of 3. They are still very much in the minority at level 7.

Private education is generally of only minor significance in the education levels corresponding to compulsory schooling, but a little more prevalent in second level-second stage. Differences between countries are especially marked for pre-primary and third level.

The numbers qualifying from second level-second stage and newly entering third level education have been rising, although the trend for second level-second stage qualified students was downward between 1984 and 1986. Since the proportion of an age group entering third level education increased more than the proportion obtaining a second level-second stage qualification, the chances that a second level-second stage student will enter higher education have increased. Conversely, the proportion of an age group obtaining a third level qualification has risen more slowly than the number of graduates.

In all education levels (the third level being excluded) the number of teachers has risen. Practically all pre-primary teachers are female, as are 60 to 75 per cent of first level teachers, but in just over half the countries, females are a minority at second level. Even so, the proportion of females in all levels has been increasing. The percentage of part-time teachers is low at pre-primary and first level but higher at the second level. In all cases, more females than males are part-time teachers.

The proportion of gross domestic product allocated to public spending on education has fallen back in the great majority of countries and ranges from 2 to 7 per cent. The proportion of private spending on education, generally hard to ascertain, is low in nearly all countries but is tending to rise. Since the proportion of total public expenditure, which exceeds 50 per cent in just over one-third of the countries, has been rising (in spite of a downward trend between 1984 and 1986 in one country out of two), the share of total public expenditure allocated to education is declining.

Comparing the share of public expenditure on education allocated to each level of public education, and spending per pupil/student within those levels, the trend has been favourable in the sense of a higher increase or a slower decline in pupil/student spending in pre-primary and primary; and for second level and, especially, third level education in the share of public expenditure.

I. PUPILS

On its own, the trend for pupil numbers in any particular level of education is not very meaningful, closely linked as it is to the size of the corresponding age group, which has varied widely since 1975, though to different degrees and in different directions from one education level to another. The pupil numbers trend also depends on the participation rate of the age group concerned at any particular level: for example, a 10 per cent increase does not have the same significance if the participation rate was high at the beginning of the period as if it had been low.

Allowing for all these factors, consideration will be given, in parallel for each of the education levels, to the trend for participation rates, pupil/student numbers and the size of the age group concerned. The age groups selected for the potential population at each level of education are identical for all countries but do not necessarily exactly reflect the situation in each individual country. Accordingly, the participation rate is lowered when the duration of studies is shorter than the number of years covered by the reference age group, and raised when the duration of studies is longer and/or some proportion of the pupils/students is younger or older than the reference age group. So the grouping of countries according to their 1986 participation rate levels is somewhat arbitrary and these rates can more appropriately be compared as to their trends over time than with one another at any given moment.

Each grouping is illustrated by two charts, for countries which had comparable participation rates in 1986 but have experienced different trends since 1975 in the sizes of the age groups or enrolments concerned. Charts show the participation rates as percentages on the right axis, trends in enrolments and age group size as an index on the left axis.

It may be helpful to recall that the participation rate refers to some given level of education, i.e. what proportion of the age group concerned is enrolled in *that* level, and not enrolment rates generally, i.e. the proportion of that age group enrolled in *any* level of education.

I.1. PRE-PRIMARY EDUCATION

Countries have been divided into four groups. The group A countries, Italy, Germany, Sweden, Belgium and France, had very high participation rates in 1986, over 85 per cent of the 3-5 age group in pre-primary education. In France and Belgium, where quite a high proportion of two-year-olds are already in education, these rates are overestimated at 100 per cent for the whole of the period. Between 1975 and 1986 participation rates rose by slightly under 30 per cent in Germany and Italy, and by nearly 80 per cent in Sweden. In all three countries the increase was especially marked between 1975 and 1980.

Conversely, the numbers of pre-primary pupils fell back in Belgium, France and Germany between 1975 and 1980, also in Italy between 1980 and 1984, whereas in Sweden they rose by nearly 30 per cent between 1975 and 1984. Following a rise between 1980 and 1984 in France and Germany, pupil numbers levelled off in France and continued to rise in Germany. After 1984, they levelled off in Italy, continued to fall back in Belgium and to rise in Sweden.

In France and Belgium, the enrolment trend was not very different from that of the reference age group. By contrast, in Germany up to 1980 and in Italy up to 1984 the decline in the 3-5 age group was much more marked than the decline in enrolments while in Sweden, the decline in the age group went hand in hand throughout the period with an increase in enrolments, most noticeably between 1975 and 1980. In Germany, Italy and Sweden, the arrival of distinctly smaller age groups made it possible to enrol a larger proportion of them.

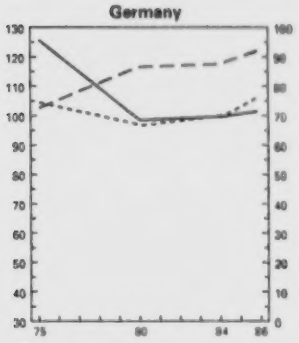
Group B, with participation rates between 55 and 70 per cent, consists of Switzerland, Luxembourg, Norway, Austria, Ireland and Spain.

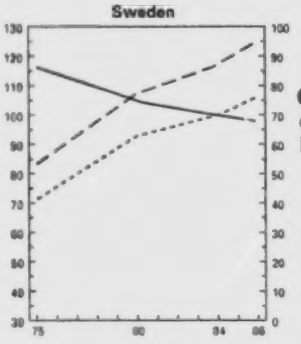
In Norway, where the participation rate was particularly low, 17 per cent at the beginning of the period, it nearly tripled between 1975 and 1980. Since the rise continued over the two subsequent periods, although less rapidly, the rate was four times higher in 1986 than in 1975. The increase was less spectacular but also very marked in Austria and Spain at the beginning of the period, where it amounted to about 29 per cent. In both countries the increase was sustained, though much less strongly, from 1980 and up to the latest year available.

Graph I.1

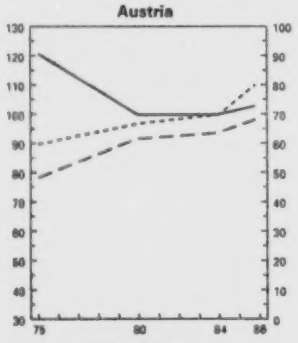
Pre-primary education

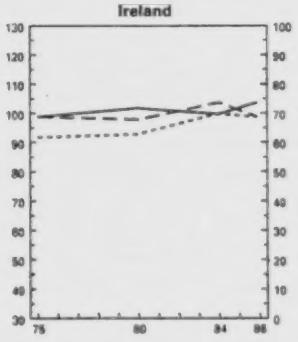
(Left-hand axis: population and school enrolments, index 100 = 1984
right-hand axis: participation rate in percentage)



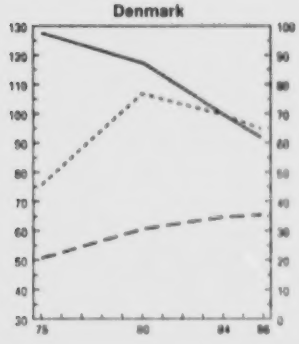


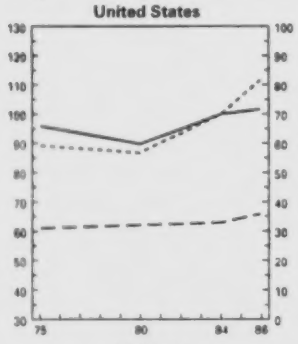
Group A. Participation rate > 85 per cent: Italy, Germany, Sweden, Belgium, France.



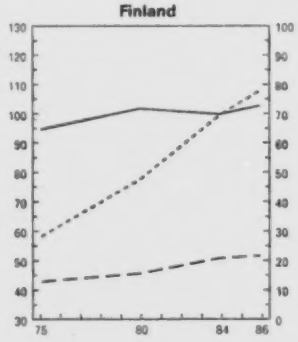


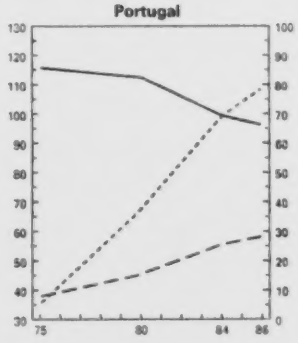
Group B. Participation rate > 55 < 70 per cent: Switzerland, Luxembourg, Norway, Austria, Ireland, Spain, Netherlands.





Group C. Participation rate > 30 < 45 per cent: United States, Denmark, Yugoslavia, Greece, Canada, Japan, United Kingdom, New Zealand.





Group D. Participation rate < 30 per cent: Finland, Portugal, Turkey.

Population 3 to 5 years old
Enrolments
Participation rate

Between 1975 and 1980 in Norway and Austria the higher rates were facilitated by a marked decline in the 3-5 age group, in contrast with Spain where the age group increased slightly. Between 1980 and 1984 this age group remained steady in Austria; it declined more slowly in Norway but very rapidly in Spain, where it continued to decline after 1984. Pupil numbers increased during the three periods in Austria and Norway and during the first period in Spain, whereafter they declined.

The pattern for the three other group B countries was altogether different. In Ireland between 1975 and 1980 the small decrease in the participation rate was due to a bigger increase in the age group than in enrolments; during the second period, the decline in the age group was accompanied by an increase in pupil numbers, and therefore in enrolment rates. After 1984, an increase in the size of the age group and a decline in pupil numbers led to a lower enrolment rate. In Luxembourg the decline in pupil numbers was at first bigger than that in the age group, so that the enrolment rate was lower, and the pattern became still more unfavourable as the age group rose more than pupil numbers. Then, after 1984, the size of the age group levelling off, pupil numbers and rates increased. In Switzerland, a smaller decline in pupil numbers than in the age group between 1975 and 1980 permitted a higher rate, but the pattern reversed between 1980 and 1984, the rate declined and then from 1984 onwards increases in both the age group and, especially, in pupil numbers resulted in a higher participation rate as well.

The Netherlands, included in this group had a participation rate of about 75 per cent from 1975 to 1984. The system was then restructured to group pre-primary education and first level together into a single basic education system with pupil age (3 to 5 years) as the only pre-primary criterion. This brought the participation rate in 1986 down to under 70 per cent. Between 1975 and 1984 the participation rate declined because of a bigger decline in pupil numbers than in the age group concerned.

Group C, with participation rates of 30 to 45 per cent, includes the United States, Denmark, Yugoslavia, Greece, Canada, Japan, together with the United Kingdom and New Zealand although for the two latter, participation rates are lower because 5 year-olds are already in first level, by law in the United Kingdom, in practice in New Zealand. For all group C countries, participation rates have risen, on the whole more notably from 1975 to 1980, but to widely varying extents. Between 1975 and 1986 they rose by 8 per cent in Canada, 16 per cent in the United States, from 40 to 47 per cent in New Zealand, Greece and the United Kingdom, 70 per cent in Denmark and 100 per cent in Yugoslavia. In Japan the participation rate rose by 15 per cent up to 1984 and then fell back slightly.

During the first period, 1975-1980, the age group declined in the United States, Canada, Denmark, Japan and, especially, New Zealand, whereas pupil numbers declined in the United States, though less steeply, remained level in Canada and increased in the other countries, very sharply in Denmark but only slightly in New Zealand. In Greece, the age group held steady while pupil numbers rose steeply and in Yugoslavia, the rise in pupil numbers was substantially larger than that in the age group.

From 1980 to 1984 the pace of the decline in the age group size was faster in Denmark and Japan, slowed sharply down in New Zealand. In Yugoslavia the decline was just perceptible. In Denmark and Japan pupil numbers also declined, though not in the same proportion, while in New Zealand and Yugoslavia pupil numbers continued to rise. In Greece, Canada and the United States, pupil numbers increased more strongly than those of the age group. In the United Kingdom from 1975 to 1984 a smaller age group went hand in hand wth a rise in pupil numbers.

After 1984, the age group declined in all group C countries except for the United States and Canada, and the United Kingdom where it levelled off. Pupil numbers declined in Denmark, Japan and Greece, but rose in Yugoslavia, Canada and, especially, the United States.

The last group is made up of three countries only: Finland, with a participation rate of 22 per cent, Portugal (29 per cent) and Turkey (3 per cent). In Turkey the types of institution covered were not the same in 1975 and 1980 as in 1984 and 1986 so the trend cannot be investigated. In Finland, participation rates increased in all three periods. Pupil numbers increased during the first period much more steeply than those of the age group and the steep rise continued between 1980 and 1984 whereas the age group declined slightly, and after 1984 whereas the age group was increasing. In Portugal during the three periods, the 3-5 age group declined but pupil numbers increased steeply as did the participation rate.

To conclude, participation rates in pre-primary education rose in most OECD countries. When that rise was due to a slower decline in pupil numbers than in the 3-5 year age group it entailed only relatively modest financial commitments on the part of countries with free places available in the schools and teachers already in post. But countries where the rise was due to a rise in pupil numbers, especially when the age group was also increasing, needed new schools or new classes and additional teaching posts, with the resulting financial implications.

I.2. FIRST LEVEL AND SECOND LEVEL-FIRST STAGE EDUCATION

These two levels are presented together because they cover compulsory schooling in most countries. Since this is generally followed by all the children concerned, there seemed no point in calculating participation rates. It must however be mentioned that in Turkey and Portugal, where participation rates in 1975 were relatively lower than in other countries, pupil numbers increased more rapidly than the age group in Turkey, except after 1984, whereas the age group declined in Portugal with the result that participation rates increased.

Differences between the trend in pupil numbers and in the size of the age group are in most cases ascribable to the decision to take age 6-15 as the age group, though this does not always reflect the actual situation. Only the trend for the age group is therefore considered. Here again, countries have been divided into four groups, with chart illustrations for two countries in each group.

Group A consists of the countries in which the 6-15 age group declined most strongly between 1975 and 1986, by between 25 and 40 per cent. It comprises the United Kingdom, Switzerland, the Netherlands, Austria and Germany. In all these countries, the age group declined between 1975 and 1980 as well as between 1980 and 1984 and after 1984. The decline was most marked between 1980 and 1984. However, looking separately at the trend for the 6-11 and the 12-15 age groups, which correspond roughly to the first level and second level-first stage respectively, the pattern differed according to country. The decline in the 6-11 age group was particularly marked from 1975 to 1980 in Germany and from 1980 to 1984 in the Netherlands and the United Kingdom; in Austria and Switzerland it was practically the same in both periods. After 1984, the 6-11 age group more or less levelled off in Germany and the United Kingdom but the decline continued in the other countries. Conversely, from 1975 to 1980 the 12-15 age group increased slightly in Germany and in the United Kingdom, remained steady in the Netherlands and declined slightly in Austria and Switzerland; the decline was steep in all countries, apart from the Netherlands, between 1980 and 1984 and continued from 1984 onwards. In all these countries, for all three periods, the decline was less marked than in the 6-11 age group.

In the group B countries, Finland, New Zealand, Canada, Italy, Denmark, Luxembourg and Belgium, the 6-15 age group declined from 1975 to 1986 by between 15 and 25 per cent. The decline was particularly marked between 1975 and 1980 in Canada and Finland, and from 1980 to 1984 in Denmark and Luxembourg; in Belgium it was steep during both periods. The 6-11 age group declined most from 1975 to 1986 in Canada, Belgium and Finland, but from 1980 to 1984 in the other countries. In Finland the 6-11 age group began to increase again after 1980 and in Canada and Luxembourg after 1984. In Canada, Belgium and New Zealand, the 12-15 age group declined most steeply between 1975 and 1980 (whereas it was increasing in Denmark and Italy); in Denmark, Finland and Luxembourg it declined more steeply between 1980 and 1984. After 1984 the decline continued except in Denmark. From 1975 to 1986 the decline was steeper for the 6-11 age group than for the 12-15 age group in four countries, Denmark, Italy, Belgium and New Zealand while the opposite occurred in Canada and Finland; in Luxembourg the decline was appreciably the same in both periods.

In the group C countries the 6-15 age group remained relatively unchanged between 1975 and 1986 in Spain and Australia; it declined very slightly in Greece and by between 8 to 13 per cent in France, Portugal, Sweden, the United States and Norway. The decline was steepest between 1975 and 1980 in Portugal and, especially, in the United States (during this period the 6-15 age group slightly increased in Spain, Sweden and Norway); between 1980 and 1984 the decline was steepest in Norway, France, Sweden and Greece. After 1984 the decline continued in all countries except the United States. For the 6-11 age group, the decline was on the whole only slight between 1975 and 1980 (in Australia and Spain the age group even increased) but gathered pace between 1980 and 1984 in Norway, France and Sweden and began in Australia. The decline continued after 1984 except in the United States, where the age group increased, and in Greece where it levelled off. Between 1975 and 1980, the 12-15 age group increased except in Australia, Portugal and France; in the United States it declined steeply. From 1980 to 1984 it grew in Australia, France and Spain but fell back in the other countries, though only slightly except in Sweden. After 1984 it declined in Norway, the United States and Greece, but remained much the same in Australia, France, Portugal, Spain and Sweden. In 1986, by comparison with 1975, the first level age group declined in all countries and particularly in France, Portugal, Sweden and Norway, whereas the second level-first stage age group increased in Norway, Spain, Sweden and Australia, remained the same in France and Greece, and declined steeply in the United States.

The group D countries, Yugoslavia, Ireland, Japan and Turkey, unlike the countries in the other groups, saw increases in their 6-15 age groups between 1975 and 1986 (up to 1984 for Japan). The increase was only slight in Yugoslavia, fairly marked in Ireland and very large in Japan and Turkey. The rapid increase between 1975 and 1980 in Ireland, Japan and Turkey slowed down between 1980 and 1984. After 1984, the 6-15 age group continued to increase slightly in Ireland, grew very much faster in Turkey but reversed to a downturn in Japan. In Yugoslavia it remained much the same during all three periods. But here again, the pattern differed according to level. For the

6-11 age group, the 1975-1980 increase in all four countries continued from 1980 to 1984 in Yugoslavia and Turkey, but not in Ireland, where the age group levelled off, nor in Japan where it declined. From 1984 to 1986 this age group declined slightly in Ireland and markedly in Japan, but grew strongly in Turkey and slightly in Yugoslavia. The increase in the 12-15 age group from 1975 to 1980 was especially marked in Ireland, from 1980 to 1984 in Japan and after 1984 in Turkey and Yugoslavia, reversing the slight downturn of the two previous periods.

Between 1975 and 1986, the 12-15 age group grew more than the 6-11 age group in Turkey and, particularly, Ireland. The increase was very marked for the 12-15 age group in Japan, while the 6-11 age group shrank. In Yugoslavia it was the other way round, though the differences were relatively minor.

In conclusion, fluctuations within age groups from one period to another, and from age group to another, compel countries to be very flexible in the use of their schools, which need to be geared to receiving more first level pupils, then second level-first stage pupils afterwards, or the reverse. Countries also need to be flexible in their allocation of teachers, who may be in over-supply at one level while in short supply at another, a particularly awkward problem when teachers are only trained or qualified for one particular level.

I.3. FULL-TIME SECOND LEVEL-SECOND STAGE EDUCATION

Here again we shall be concerned with the comparative trend for participation rates, pupil numbers and the reference age group. Some countries do have various forms of part-time education alongside full-time education at this level, but those are excluded from this section, first because they are not always comparable from one country to another. Some countries have apprenticeships (full-time training but with only part taking place in educational institutions), while other countries have general or vocational education whose duration can vary quite widely. Secondly, it happens very often that a substantial proportion of part-time pupils are older than those in full-time general or vocational/technical education. This distorts the participation rates, because full-time and part-time pupils together may even outnumber the age group selected for calculating the rate. In Germany and Denmark, though, apprenticeship is considered as a form of full-time education and is therefore included as such.

Ages 16-19 have been selected as the age group even though in many countries, second level-second stage education lasts only three years (the United States counts as second level only the last two years of the second stage). There are two reasons for this choice. One is that account has to be taken of countries in which the duration is four years, the other being that in very many countries, a substantial number of pupils are one or two years older than the usual secondary leaving age and therefore swell the pupil numbers; in both instances, taking only three years gave in certain countries participation rates of more than 100 per cent. This means that for second level-second stage education even more than for other levels, only trends in the rates should be compared, not the rates themselves, with one another.

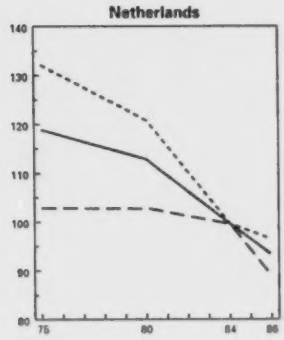
Countries have also been classified in four groups, according to the level of their participation rates in 1986 compared with 1975 and not, for the reasons mentioned above, according to the rates themselves. Belgium is not included because the only available data concern the combined first and second stages of second level.

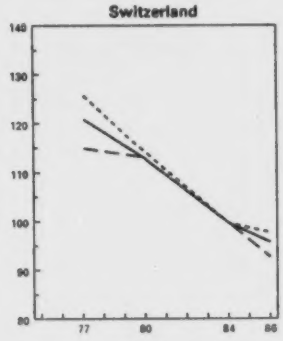
Group A comprises Denmark, Greece, Spain and the Netherlands, whose participation rates all increased by over 50 per cent. Growth was particularly marked between 1975 and 1980 in Denmark and Spain and from 1980 to 1984 in the Netherlands, though with smaller differences between the two periods. In Greece the rate remained much the same during both periods. After 1984 the increase continued, particularly in Denmark. Pupil numbers rose very strongly in Denmark and Spain during the first period and in Greece and the Netherlands during the second. The increase continued in all four countries after 1984. The 16-19 age group increased too, both from 1975 to 1980 and from 1980 to 1984, except in the Netherlands where it declined during the second period, but by much less than pupil numbers. After 1984 the 16-19 age group levelled off in the Netherlands, declined slightly in Spain and fairly substantially in Greece and Denmark.

Participation rates in group B countries rose by a proportion ranging from just over 20 to 35 per cent. This group consists of New Zealand, France, Switzerland, Australia, Sweden, Luxembourg, Ireland, Finland and Turkey. The rise was most marked between 1975 and 1980 in France, Switzerland, Sweden, New Zealand and, especially, Turkey and Finland; between 1980 and 1984 it was most marked in Luxembourg and Ireland, though it also continued in the other countries. After 1984 the participation rate continued to rise except in Sweden, where it turned down slightly, and in Switzerland where it remained steady. From 1975 to 1980 pupil numbers grew in all countries, more strongly than the age group except in Luxembourg, where the age group grew sligthly more rapidly, and in Finland where numbers fell back. From 1980 to 1984 the growth in pupil numbers continued more slowly, except in Ireland and Luxembourg, while

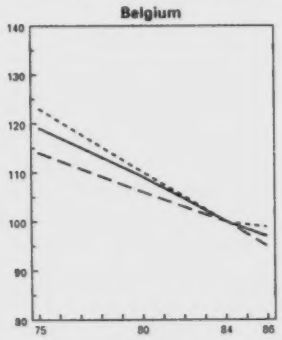
Graph I. 2

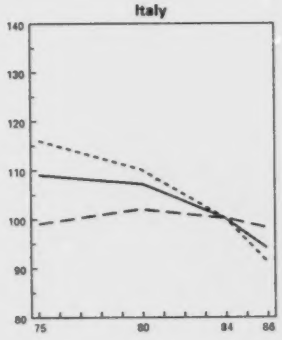
First level education and second level - first stage education (index 100 = 1984)



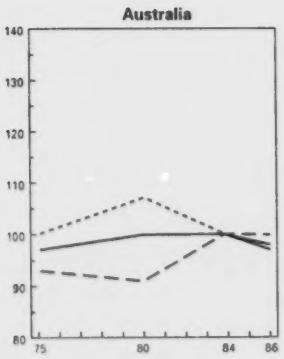


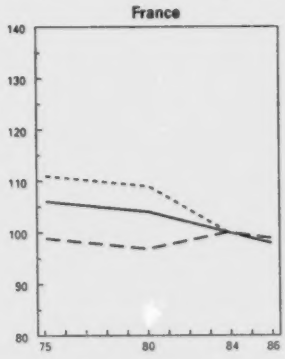
Group A. Decrease in population aged 6 to 15 > 25 per cent: United Kingdom, Switzerland, Netherlands, Austria, Germany.



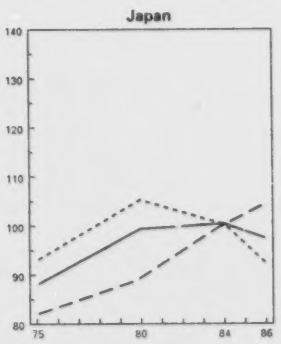


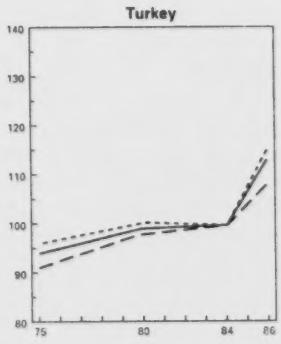
Group B. Decrease in population aged 6 to 15 >15 < 25 per cent: Finland, New Zealand, Canada, Italy, Denmark, Luxembourg, Belgium.





Group C. Decrease in population aged 6 to 15 < 15 per cent: Spain, Australia, France, Greece, Portugal, Sweden, United States, Norway.





Group D. Increase in population 6 to 15: Yugoslavia, Ireland, Japan, Turkey.

——— Population 6 to 15
····· Population 6 to 11
– – – Population 12 to 15

the age group declined in Finland, Luxembourg and New Zealand, remained relatively steady in France, Switzerland and Ireland and continued to grow in Sweden and Turkey though less rapidly than pupil numbers in Sweden and a little more rapidly in Turkey. After 1984 the rise in pupil numbers continued in France, Ireland, Turkey and New Zealand whereas the age group hardly changed at all, also in Australia where it was more marked than the rise in the age group. In the other countries, both pupil numbers and the age group shrank. Pupil numbers declined to a lesser extent than the age group in Finland, Switzerland and Luxembourg, but more markedly in Sweden.

Italy, Austria, Yugoslavia, Germany and Norway, where participation rates rose by between some 10 and 20 per cent, comprise group C. Growth remained very much the same between 1975 and 1980 and between 1980 and 1984 in Germany, Italy and Norway. In Austria it was stronger between 1980 and 1984 while in Yugoslavia, following the strong upturn between 1975 and 1980 it declined. After 1984 participation rates continued to rise in Austria, Germany and Italy but fell back in Yugoslavia and Norway. From 1975 to 1980 pupil numbers rose at the same rate as the age group in Austria, more rapidly in Germany, Italy and Norway but declined in Yugoslavia. The growth in pupil numbers continued from 1980 to 1984 in Norway and Italy, where it was stronger than for the age group, also in Austria and Germany, where the age group declined. In Yugoslavia both age group and the pupil numbers declined, the former more rapidly than the latter. In all the group C countries apart from Italy, pupil numbers declined after 1984, though less strongly than the age group, except in Yugoslavia and Norway where the age group numbers rose.

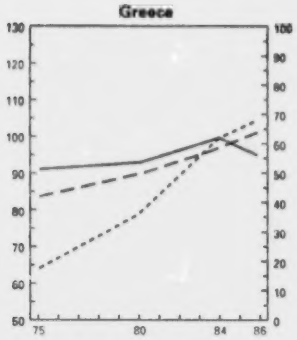
The group D countries, Japan, United States, Canada and United Kingdom, experienced extremely low growth in participation rates, from 1 to 3 per cent in Japan, the United States and Canada, while in the United Kingdom the rate actually fell. In Canada the steep decline between 1975 and 1980 was largely offset by the rise after 1980; in the United Kingdom, the slight declines between 1975 and 1980 and 1980 to 1984 were followed by a slight increase, though this was not enough to return the rate to its 1975 level; in Japan the pattern was the reverse, a rather modest rise from 1975 to 1980 followed by slight declines from 1980 to 1984 and thereafter; in the United States, the rates hardly changed over any of these periods. During the first, pupil numbers fell in Canada whereas the age group grew slightly; in Japan and the United Kingdom, an expanding age group was accompanied by a rise in pupil numbers, a higher rise in Japan, a matching one in the United Kingdom. The United States saw practically no change in either pupil numbers or the age group. From 1980 to 1984, in Canada and the United States, the age group declined fairly steeply, as did pupil numbers though to a lesser extent. In Japan pupil numbers grew slightly less than the age group and in the United Kingdom they declined although the age group grew slightly. After 1984 pupil numbers began to rise again in Canada, although the age group was declining; in Japan, the rise in pupil numbers did not quite keep up with the rise in the age group; in the United Kingdom and the United States both declined, the age group more markedly in the United Kingdom and pupil numbers more markedly in the United States.

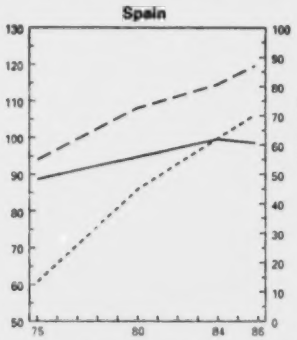
To conclude, participation rates rose over all three periods in all but a few countries (Canada from 1975 to 1980, Japan from 1980, Norway, Sweden, Switzerland and the United States from 1984 and the United Kingdom which saw a steady downturn till 1984). Between 1975 and 1980 the age group grew in all countries except Finland, the United States and Yugoslavia; it continued to grow or levelled off between 1980 and 1984 in most countries but shrank substantially in Canada and the United States and to a lesser extent in Finland, Luxembourg and New Zealand. After 1984, in contrast, the age group remained steady or declined in all countries, the only exceptions being Australia and, in particular, Japan. Pupil numbers rose everywhere between 1975 and 1986, except in Canada and the United States for essentially demographic reasons. In many countries the rise was marked: more than one-third in the Netherlands, Ireland, Greece, Denmark and Turkey, between 20 and 25 per cent in France, New Zealand, Italy, Norway, Sweden and Spain. Between 1975 and 1980 the only decline in pupil numbers occurred in Canada. Between 1980 and 1984 pupil numbers declined in Canada, the United Kingdom, Yugoslavia and, especially, the United States. After 1984, though, in 10 of the 22 countries pupil numbers declined less sharply than the size of the age group except in Norway, Sweden, the United States and Yugoslavia. The enrolment of increasing numbers of young people in education beyond compulsory schooling seems to have become a policy priority and countries have had to cope with additional needs for places, teachers and financial resources.

Graph I. 3

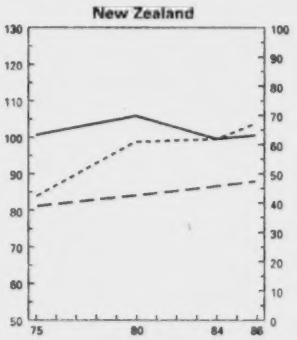
Second level - second stage full-time education

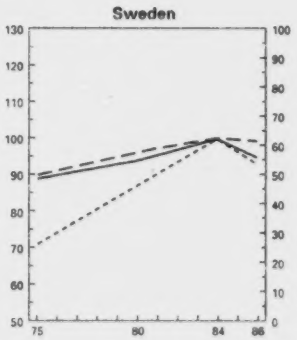
(Right-hand axis: population and school enrolments, index 100 = 1984
left-hand axis: participation rate in percentage)



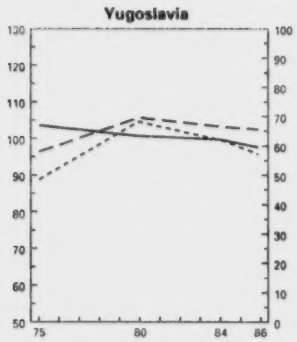


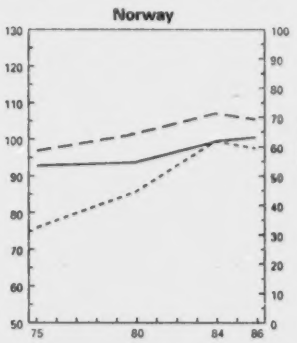
Group A. Increase in participation rate > 50 per cent: Denmark, Greece, Spain, Netherlands.



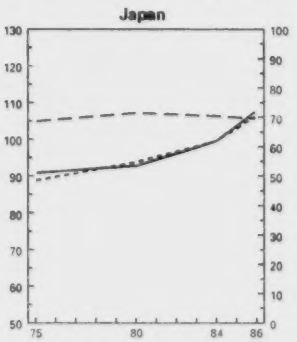


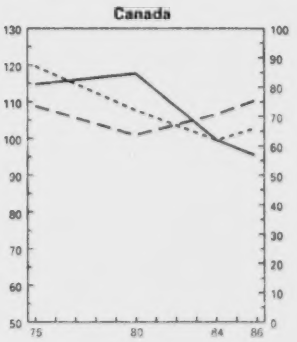
Group B. Increase in participation rate > 20 < 35 per cent: New Zealand, France, Switzerland, Sweden, Luxembourg, Ireland, Finland, Turkey, Australia.





Group C. Increase in participation rate > 10 < 20 per cent: Italy, Austria, Yugoslavia, Germany, Norway.





Group D. Increase in participation rate 3 per cent: Japan, United States, Canada, United Kingdom.

——— Population 16 to19
- - - - - - Enrolments
— — — Participation rate

21

I.4. THE DIFFERENT TYPES OF SECOND LEVEL-SECOND STAGE EDUCATION

The preceding section considered the overall trend for pupils in full-time second level-second stage education. As mentioned, however, a few countries at least have part-time forms of education at this level. Furthermore, full-time education may be either general or vocational/technical, except in Australia, Canada and the United States where education is comprehensive. How pupils are distributed among the different types of education varies considerably. Here too, each country has been put into one of four groups. Countries in the first two are those where full-time and part-time education exist side by side, while countries in the two others have no part-time education.

Group A comprises the United Kingdom, the Netherlands, Austria and Switzerland. The proportion of pupils in part-time education varied in 1986 from between about one-third and two-thirds of total pupil numbers. Germany, with a proportion of 60 per cent in 1986 (the last year for which the reply to the questionnaire distinguished between full-time and part-time education), would normally have been included in this group, but because it has since decided, especially for the purposes of this study, that apprenticeship should count as full-time education, has been placed in group C. In Austria, vocational/technical education has been gaining ground from part-time and general education, this latter attracting the fewest pupils of the three. In the United Kingdom from 1975 to 1984 the share of part-time education increased, and continued to do so after 1984, as did the relatively small share of vocational/technical education which subsequently levelled off, while the share of general education declined rather sharply. In the Netherlands, the proportion of pupils in part-time education rose between 1975 and 1980 but then declined, returning to its 1975 level by 1984 and remaining steady since. In all three periods the share of vocational/technical education grew (especially in 1980 and 1984) while that of general education declined, particularly in 1975 to 1980; by 1984 general education, which in 1975 had been attracting the highest share of pupils, now had the lowest share of the three. In Switzerland the share of part-time education, by far the largest, declined between 1975 and 1980, then levelled off; the share of general education hardly changed and the very low share of vocational/technical education grew until 1984 and then levelled off.

Group B countries are those which do have some part-time education but only a little (3 to 10 per cent). These are Japan, Norway, France, Ireland and Belgium, together with countries where the part-time education share is appreciably lower than in group A, i.e. Australia, Luxembourg and New Zealand (18 to 29 per cent). In Australia, Belgium and Ireland, from 1984 to 1986 (the only years for which data are available), the share of part-time education shrank in Australia as pupils opted for comprehensive education and in Luxembourg and New Zealand for vocational/technical and general education which continued to attract the greatest numbers. In France and Luxembourg, vocational/technical education predominated. In France, the share of general education increased slightly and fluctuations in the share of part-time education were mirrored by those in vocational/technical education, until 1984 when both declined slightly. In Luxembourg, the proportion of pupils in general education declined, the proportion in vocational/technical education increased and the proportion in part-time education, after rising between 1975 and 1980, declined between 1980 and 1984, returning to its original level by 1986. In Norway, the share of part-time education varied slightly up and down, while that of vocational/technical education grew; by 1980 it had caught up with, and has now overtaken, general education, which had predominated in 1975. New Zealand has little or no vocational/technical education and general education largely predominates. In Japan, the decline in the share of part-time education between 1975 and 1980, and especially the steady decline in the share of vocational/technical education have led to a very considerable increase in the share of general education.

The group C and D countries have no part-time education within the school system. Group C comprises those countries in which vocational/technical education has a higher share than general education, very slightly higher in Finland, much higher in Yugoslavia, Sweden and Italy, as in Germany and Denmark where vocational/technical education also includes part-time training. In Finland and Germany, the proportion of pupils in general education and vocational/technical education remained very much the same from 1975 to 1986; in Italy and especially in Denmark, the share of general education declined steadily as pupils opted for vocational/technical education. The same happened in Sweden and Yugoslavia from 1980 onwards.

In Turkey, Spain and Greece, the group D countries, general education predominates but following an increase between 1975 and 1980 its share shrank as that of vocational/technical education grew.

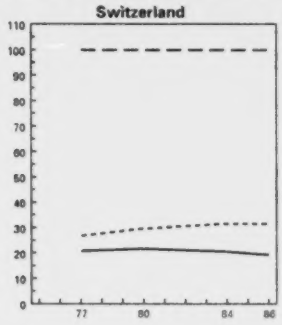
The patterns in the various countries are so different that it is hard to draw any conclusion. It would nevertheless appear that with a few exceptions – Japan, in particular – the share of general education relative to the share of vocational/technical education alone, or relative to the share of the latter together with part-time education, tended either to decline between 1975 and 1986, sometimes quite sharply, or to remain much the same.

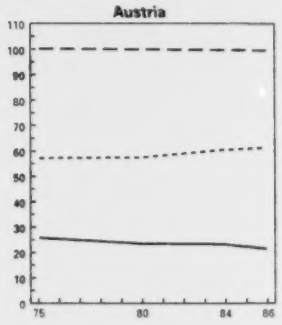
Graph I. 4

Different types of second level - second stage education

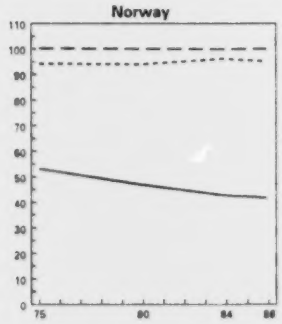
(Proportion of each type in total enrolments)

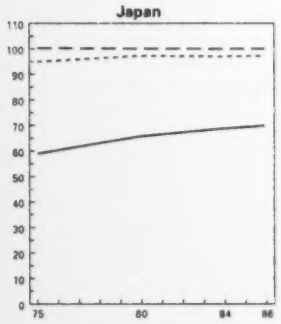
a) Countries with part-time education





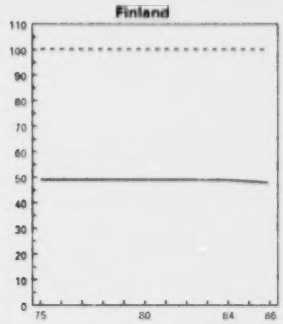
Group A. Significant share of part-time education: United Kingdom, Netherlands, Austria, Switzerland.

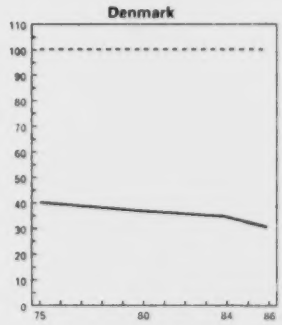




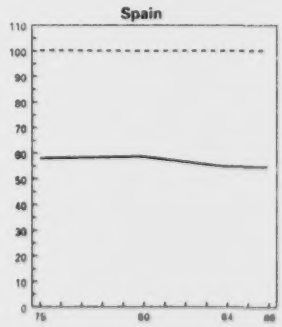
Group B. Small share of part-time education: Japan, Norway, France, Ireland, Belgium, Australia, Luxembourg, New Zealand.

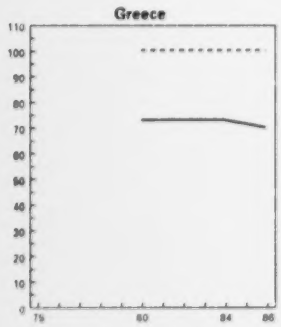
b) Countries without part-time education





Group C. Preponderance of vocational/ technical education: Finland, Yugoslavia, Sweden, Italy, Germany, Denmark.





Group D. Preponderance of general education: Turkey, Spain, Greece.

——— General education

------- Vocational/technical education

– – – Part-time education

II. STUDENTS

II.1. TOTAL ENROLMENTS

As for the other levels of education, the student enrolment trend will be analysed not separately, but in combination with the trends in age groups and participation rates for both full-time and part-time students. Although not all countries have formal arrangements for part-time higher education, which often takes longer than full-time studies but enables a student to combine studying with some other activity, usually employment or family-related, the rules for effective participation are generally much more flexible than for the lower levels. Students enrolled in full-time education can in fact attend courses only some of the time, whether or not they are engaged in any other activity.

The reference population is the 20-24 age group, though this group corresponds to national patterns even less closely than the reference populations chosen for first and second level education, because the time third level studies normally last varies from one country and from one discipline to another and the actual time they take can vary substantially from the norm. Moreover, a proportion of students, which varies but can be quite considerable, only take up third level education after some delay, so that there may be a break between second level-second stage and third level education. This has become commoner as so many countries have considerably relaxed entry requirements and the secondary-leaving certificate is no longer essential. So here too, it is the participation rate trends that matter, not the rates themselves at any particular point, even though those are mentioned as benchmarks.

Countries are grouped, as for second level-second stage education, according to their participation rate trends between 1975 and 1986.

Group A comprises the countries in which participation rates rose over that period by 50 per cent or more. They are Greece, Spain, Finland and Belgium. The 20-24 age group grew by 13 per cent in Greece and 23 per cent in Spain between 1975 and 1986. In Belgium it grew more moderately until 1984, when it turned slightly down, and in Finland it declined. Enrolments increased by over 80 per cent in Spain, about 70 per cent in Greece, nearly 60 per cent in Belgium and slightly less in Finland. In 1986, participation rates ranged from 27 per cent in Greece to 36 per cent in Finland. In Turkey, for which data are comparable only from 1980 onwards, the very low participation rate increased substantially, as did enrolments and, to a lesser extent, the age group. In Ireland, the 1975 and 1980 data refer only to full-time students while the 1984 and 1986 data refer to both full-time and part-time students. In both periods, enrolments rose substantially while the age group increased only slightly.

In the group B countries – France, Japan, Switzerland, New Zealand, Austria, Canada and Norway – participation rates rose from 1975 to 1986 by between 25 and 45 per cent. The age group grew in Norway and Switzerland until 1986; in Austria, Canada and New Zealand it grew until 1984, then levelled off in Austria and declined in Canada and New Zealand. France saw very little change in the age group, while in Japan a sharp decline between 1975 and 1980 was followed by a less marked decline and then a levelling off. Enrolments increased in all seven countries, though to very different extents: slightly (by 10 per cent) in Japan, moderately (by 20 per cent) in France, by between 43 and 56 per cent in New Zealand, Canada, Norway and Switzerland; in Austria enrolments almost doubled. In 1986 participation rates varied from 22 per cent in Switzerland to 53 per cent in Canada.

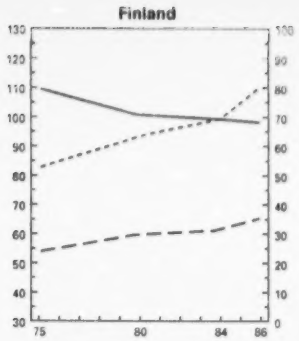
In the group C countries – the United States, the United Kingdom, Germany, Australia (from 1975 to 1984) and the Netherlands – participation rates rose by 12 to 19 per cent. The increase in enrolments for the period as a whole was particularly marked in Germany (62 per cent), slightly less so in the United Kingdom (45 per cent) and the Netherlands (38 per cent); in the United States the increase remained steady at 18 per cent until 1984, declining slightly thereafter; in Australia, enrolments rose by nearly 30 per cent between 1975 and 1984. From 1975 to 1986 the size of the age group grew in Germany and in the United Kingdom. It also increased until 1984 in Australia, the Netherlands and the United States, whereafter it remained the same in Australia and the Netherlands and shrank in the United States. It is in the group C countries that the differences in 1986 participation rates are greatest, ranging from 22 per cent in the United Kingdom to 60 per cent in the United States.

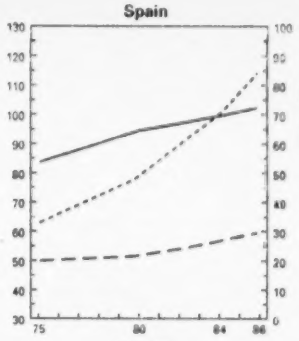
In the group D countries – Denmark, Italy, Sweden and Yugoslavia – participation rates in 1986 were either lower than in 1975 (by 1 percentage point in Yugoslavia and Italy, and 4 points in Denmark) or barely higher (by 1 percentage point in Sweden). In Denmark, the decline was steady whereas in the other countries, participation rates rose between 1975 and 1980, only to fall back subsequently. Enrolments increased until 1984 in Italy and Sweden, and from 1975 to 1980 in Yugoslavia, whereas in Denmark they dropped; thereafter the pattern reversed, with more enrolments in Denmark but fewer in the other countries. The age group size increased during each period in Italy, and after 1980 in Denmark; it shrank in Yugoslavia and in Sweden between 1975 and 1980, but increased thereafter. In 1986 participation rates ranged from 19 per cent in Yugoslavia to 30 per cent in Sweden.

Graph II. 1

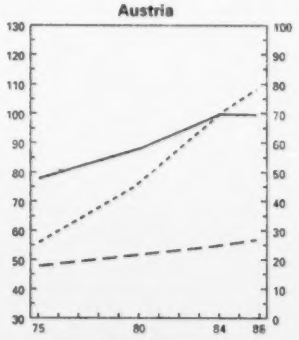
Third level education

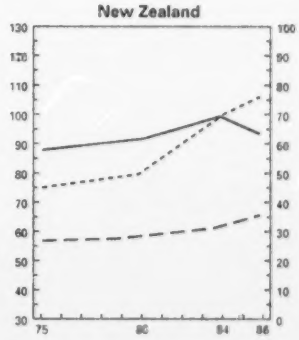
(Left-hand axis: population and enrolments, index 100 = 1984
right-hand axis: participation rate in percentage)



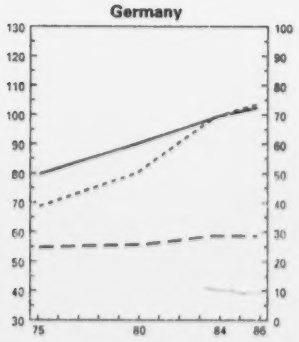


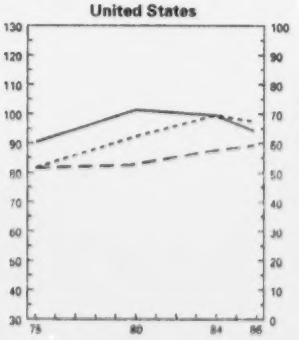
Group A. Increase in participation rates ≥ 50 per cent: Greece, Spain, Finland, Belgium, Turkey, Ireland.



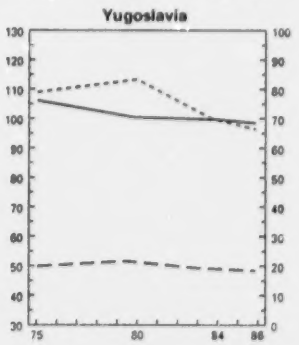


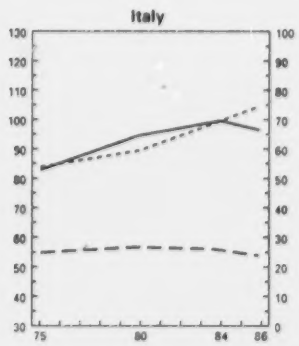
Group B. Increase in participation rates > 25 < 45 per cent: France, Japan, Switzerland, New Zealand, Austria, Canada, Norway.





Group C. Increase in participation rates > 10 < 20 per cent: United States, United Kingdom, Germany, Australia, Netherlands.





Group D. Decrease or increase in participation rates < 2 per cent: Denmark, Italy, Sweden, Yugoslavia.

Population aged 20-24
Enrolments
Participation rates

To conclude, in the great majority of countries, the size of the 20-24 age group increased at least until 1984, but since the number of enrolments increased at a faster pace participation rates were higher. In developing third level studies, countries therefore had to deal with a still less favourable demographic pattern than in second level-second stage education. This imposed a heavy financial burden, especially as expenditure per student is generally far higher than expenditure per secondary pupil.

II.2. THE DIFFERENT LEVELS OF THIRD LEVEL EDUCATION

Third level education has long been and to some still is synonomous with university education, though all countries in fact also have shorter, often vocationally-oriented education too, usually called non-university education and classified in ISCED level 5; level 6 corresponds to university courses preparing for a first full degree and level 7 to post-graduate programmes accessible to students holding a level 6 degree.

Countries have been classified according to the relative size of their level 5 in 1986. The group A countries – New Zealand, Norway, Sweden and the Netherlands – had as many students or more at level 5 as at level 6 (or levels 6 and 7 for those countries making no distinction between them. This was also true of Norway, which has adopted a classification in which level 7 students are apparently more numerous than level 6 students (this classification being out of line with the ISCED definitions referred to above). Between 1975 and 1986 this proportion remained relatively steady in New Zealand, fell in the Netherlands, rose by more than one-third in Norway and doubled in Sweden. Separate data for levels 6 and 7 are available only for New Zealand and Sweden; the proportion of students in this level in 1986 increased slightly in New Zealand (to 7 per cent) and declined in Sweden (to 6 per cent).

In Ireland, Switzerland, the United Kingdom, the United States, Greece and Belgium, the group B countries, the proportion of students in level 5 in 1986 ranged from 33 to 45 per cent. The proportion rose from 1975 to 1986 in Ireland, in spite of a downturn between 1975 and 1980, and also in Greece where it more than doubled. It rose in Switzerland from 1980 to 1984 (the only years for which data are available) and in the United States rose until 1984, when it slightly decreased. It declined rather strongly, though, in the United Kingdom and in Belgium between 1984 and 1986. Switzerland, the United Kingdom and the United States, together with France, which is classified in group D, were the only countries with 10 per cent or slightly more of students in level 7. That percentage has remained much the same in Switzerland and the United Kingdom but has fallen slightly in the United States. In Ireland, where only full-time students are covered, the percentage of students in level 7 increased between 1975 and 1980 but then fell and by 1986 was back to its 1975 level, 5 per cent. In Belgium and Greece, statistics for levels 6 and 7 are not recorded separately.

The group C countries, with 22 to 29 per cent of students in level 5 in 1986, comprises Canada, Denmark, Finland and Australia (for which country the data relate only to 1984). In Finland, the level 5 proportion increased during each period, in Canada and Denmark it increased up to 1984 but then shrank and in Denmark was back to the 1975 level by 1986. In 1986, level 7 students represented 8 per cent of total student numbers in Canada, (a proportion slightly down on 1975 and 1980), 6 per cent in Finland (slightly up) and 7 per cent in Australia in 1984. Denmark does not distinguish between levels 6 and 7.

Group D, the last, is the largest. It comprises Spain, Italy, Austria, Turkey, Germany, Yugoslavia, France and Japan. In 1986 the proportion of level 5 students was negligible in Spain, very low in Italy (at 3 per cent) and in Austria (7 per cent). In the other countries it ranged from 11 to 18 per cent. Since 1975 the proportion has remained steady in Japan, Italy and Spain, whereas it increased regularly in France and, until 1984, in Turkey. In Austria and Germany it fell by about one-third and in Yugoslavia by nearly half. In 1986 France and the United States had proportionally the largest number of level 7 students – 13 per cent, slightly down on earlier years. In Germany and Yugoslavia level 7 is counted in with level 6. In the other countries the proportion of level 7 students was very low, ranging from 3 to 5 per cent.

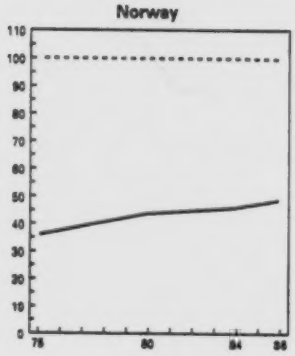
Since in all the countries in the various groups the proportion of level 7 students was either very low or relatively low, and did not change much, the changes in numbers in level 5 trends will be reproduced virtually identically in level 6, which accordingly seems not to require analysis.

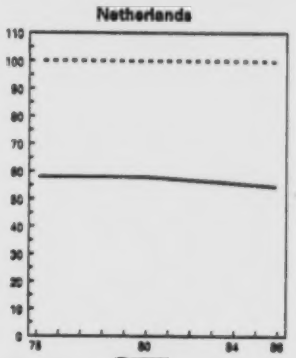
The spread of students over the different levels varies very widely from country to country. Approximately half the countries have only a very small or modest non-university sector, or none at all, accounting for less than a quarter of student numbers, while in other countries the non-university sector predominates, or at least matches level 6. Since 1984, the proportion of level 5 students does seem to have been falling off somewhat in certain countries, especially those in which it had been relatively high, but it is still too soon to speak of any real trend.

Graph II. 2

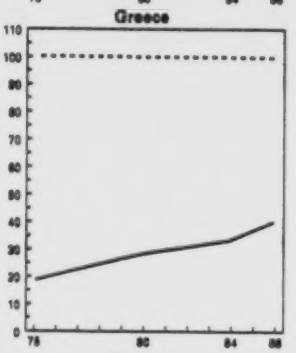
Different levels of third level education

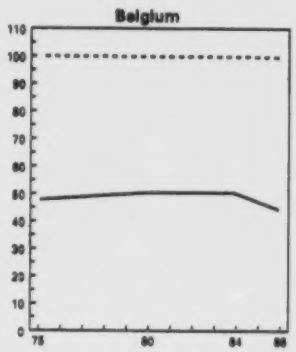
(Percentage distribution of students between the various levels)



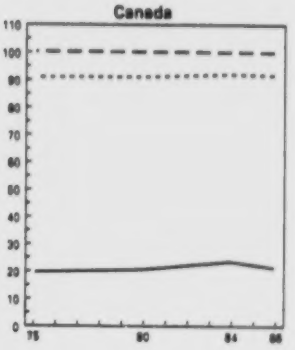


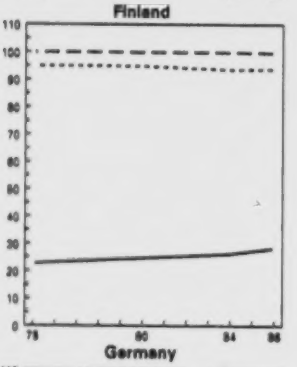
Group A. Level 5 > 45 per cent: New Zealand, Norway, Sweden, Netherlands.



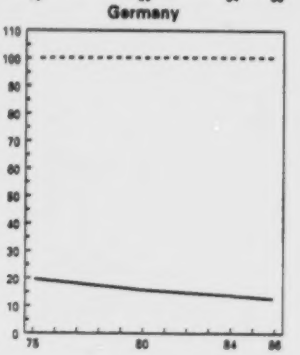


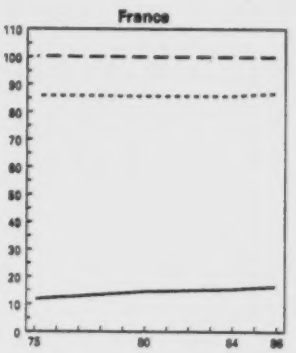
Group B. Level 5 > 33 45 per cent: Ireland, Switzerland, United Kingdom, United States, Greece, Belgium.





Group C. Level 5 > 20 < 30 per cent: Canada, Denmark, Finland, Australia.





Group D. Level 5 > 20 per cent: Spain, Italy, Austria, Turkey, Germany, Yugoslavia, France, Japan.

——— Level 5

------- Level 6 (levels 6 and 7 for Belgium, Germany, Greece, the Netherlands and Norway)

– – – Level 7

II.3. PART-TIME STUDENTS

In about half the OECD countries, some third level education courses are *organised* on a part-time basis, usually for those who have been compelled or have chosen to take employment on leaving secondary education while preparing for third level qualifications, or else for older people who already have employment or family commitments but want to undertake further studies. The other countries also have student categories of this kind but as there are no courses specifically tailored for their needs, students have to attend full-time courses as and when they can.

The proportion of students in organised part-time education varies widely from country to country and especially from level to level. In Germany, Belgium and Switzerland part-time education is available only at level 5. Take-up was very low in Germany, only 10 per cent of students in 1986, but over 20 per cent in Belgium and nearly 45 per cent (1984) in Switzerland. In those three countries the proportion of part-time students has been rising. In the Netherlands the pattern is fairly similar: very few part-time students in levels 6 and 7 (7 per cent) and 28 per cent in level 5. However, the number in levels 6 and 7 has been rising compared with previous years, while the numbers in level 5 have been falling quite sharply.

In Japan the proportion is low and fairly similar at both levels: 10 per cent for level 5, showing a marked decline; 14 per cent in level 6 but rising since 1980. Norway's 1975 pattern was fairly similar to that of Japan, with 13 per cent of part-time students at level 5 and 8 per cent at level 6. However, since numbers rose much more rapidly in level 5 than in level 6, the discrepancy widened so that by 1986 the proportion was 32 per cent at level 5 and 17 per cent at level 6.

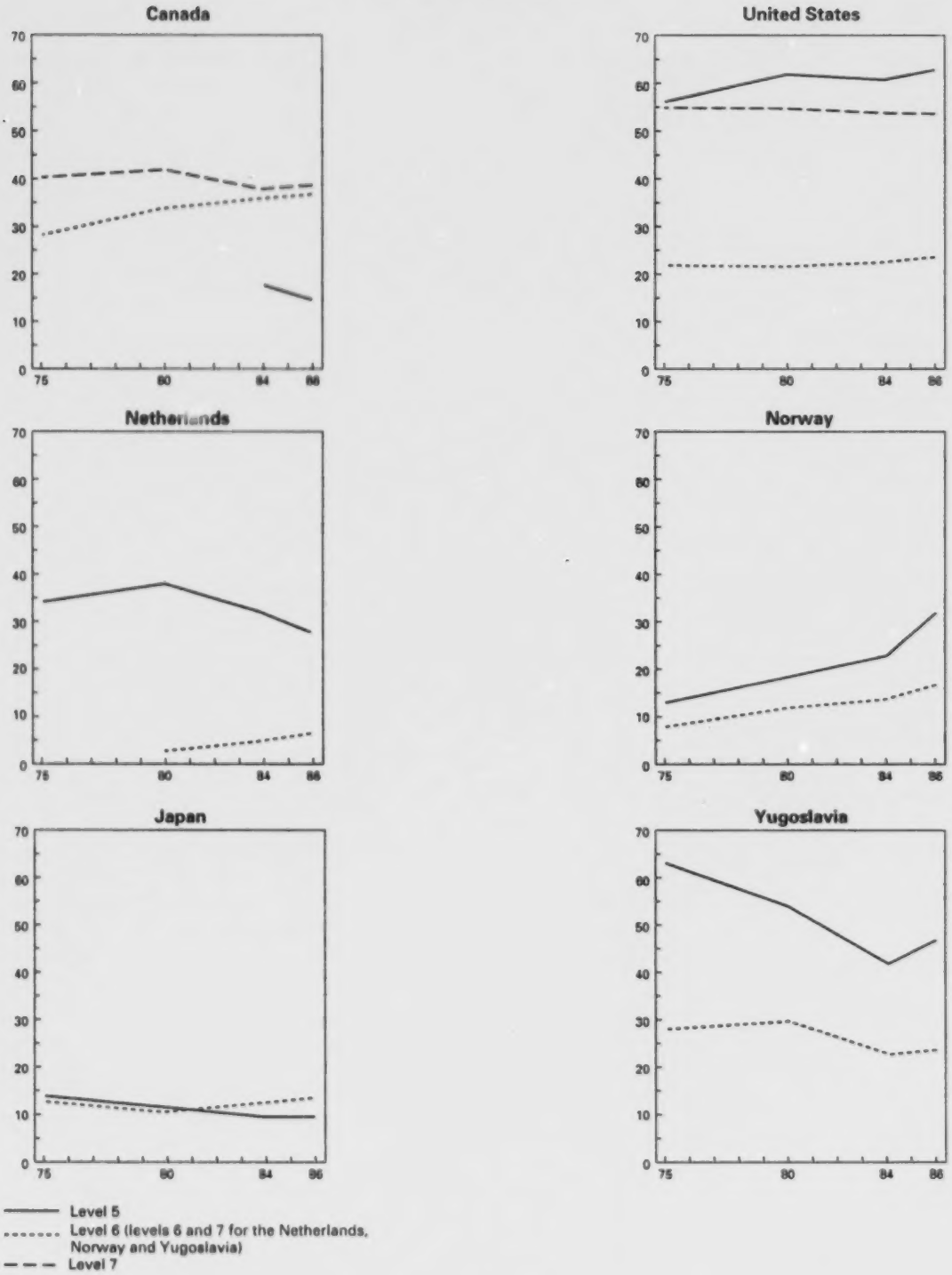
In Yugoslavia, Australia, the United States, the United Kingdom and New Zealand, from 47 to 75 per cent of level 5 students were part-time in 1986 (Australia: 1984). The proportion had risen since 1975 in the United States, and declined steeply in Yugoslavia. At level 6 the proportion was much lower but did even so amount to between 21 and 39 per cent in 1986. In the United States it has been increasing slightly, but declining quite sharply in Yugoslavia. For Australia, New Zealand and the United Kingdom the data relate only to 1984 or to 1984 and 1986, making it impossible to follow the trend for part-time education in their case.

Canada's pattern is the opposite, with a higher proportion of part-time students in level 6 (37 per cent in 1986, a distinct increase over the whole period) than in level 5 (15 per cent), a decline compared with 1984. Since the 1975 and 1980 data are not complete they have not been included.

The proportion of part-time students in level 7 is only mentioned *pro memoria*. The level 7 student, preparing a post-graduate diploma is mainly working individually under supervision, with far less attendance at courses or other structured teaching sequences than in lower levels, so the concept of part-time becomes less meaningful. In 1986 the part-time proportion was 39 per cent in Canada and New Zealand, 44 per cent in the United Kingdom and 54 per cent in the United States. The pattern in Canada and the United States, the only countries for which data covering the four reference years are available, changed very little.

Graph II. 3

Part-time students
(Percentage in each level)



III. POPULATION AGED 3 TO 24 AND POPULATION IN EDUCATION

To supplement the two preceding chapters on enrolments in each of the levels of education, it seemed interesting to look at the trends in the potential population and in the population in education as against the total population, and at their impact on participation rates. The potential population is that aged 3 to 24, the cut-off ages selected for the study of trends in the various levels. It must however be borne in mind that total numbers, and therefore participation rates, are influenced by factors other than demographic: the prevalence of pre-primary education; the age of entry to compulsory education and its duration; the leaving age for second level education and the duration of the various forms of third level education. A country with little pre-primary education, where compulsory schooling starts at age 7 and lasts 8 years, or where the young complete secondary education towards the age of 17 and leave third level education with a first university degree after 3 or 4 years may appear to have fewer young people in education overall than a second country in which the patterns are reversed, even though it may have enrolment rates for young people aged 17 to 21, for example, that are much higher than in that second country.

The population aged 3 to 24 as a percentage of the total population varied, in 1986, from 28 per cent in Germany to 50 per cent in Turkey. But in all the OECD countries the percentage was lower than in 1975. The relative magnitude of that decline was the basis for grouping countries. The Netherlands, Finland, Portugal, the United States and Canada in which the decline was steepest, from 15 to 19 per cent, form group A. The population in education as a percentage of the total population also declined in those countries, but less steeply than that of the potential population – rather less than half as much in Finland and Portugal. In the United States, however, the decline was fairly similar in both cases. Participation rates for the population aged 3 to 24 therefore increased by 4 to 5 percentage points, except in the United States where the rate increased by only 1 point. In 1986, participation rates exceeded 75 per cent in the Netherlands, 70 per cent in the United States and Canada, 65 per cent in Finland and 47 per cent in Portugal.

Group B comprises the countries in which the potential population as a proportion of the total population has fallen by 10 to 13 per cent. These are Australia, New Zealand, Switzerland, Belgium and Germany. In these countries the population in education has also declined though, except in New Zealand, at the same pace as or slightly faster than the potential population. As a result, in Germany, the participation rate in 1986 was the same as in 1975 while in Switzerland it was slightly higher and in New Zealand it was 7 percentage points higher. In Belgium, for which data are comparable only for 1975 and 1980, then for 1984 and 1986, a slight increase occurred during the first period and a slight decline during the second. In 1986 the rates ranged from 63 per cent in Australia (in 1984, the only year for which data are complete) and 78.5 per cent in Belgium.

In the other countries, from 1975 to 1986 the decline in the proportion of the total population aged 3 to 24 was under 10 per cent. Those countries in which the population in education declined have been put into group C; countries in which it increased have been put into group D. group C consists of Denmark, Yugoslavia, France, Austria, the United Kingdom, Italy, Luxembourg. In Denmark, Yugoslavia and France the population in education declined less rapidly than the potential population and participation rates rose. In the United Kingdom, both populations declined at much the same pace, so participation rates remained much the same. In the last three countries the population in education declined the most steeply, so participation rates were lower.

In the group D countries, Greece, Ireland, Japan, Norway, Spain, Sweden and Turkey, although the population aged 3 to 24 declined much as in the group C countries, the population in education was higher in 1986 than in 1975 although the increase was not uniform. In Greece, Spain and Turkey, except for a slight dip between 1975 and 1980, the increase was a steady one. From 1980 in Japan and Sweden, and from 1984 in Norway, though the upturn of the earlier periods gave way to a decline, figures were still up. In Ireland, where the 1975 and 1980 data are not comparable with those for 1984 and 1986, the population in education held steady during the first period and increased slightly during the second. Participation rates fluctuated similarly with a very pronounced, steady rise in Greece, slightly smaller rises in Spain and Norway, and up to 1984 in Turkey, Japan and Sweden. The rate then declined to varying degrees in the three last countries.

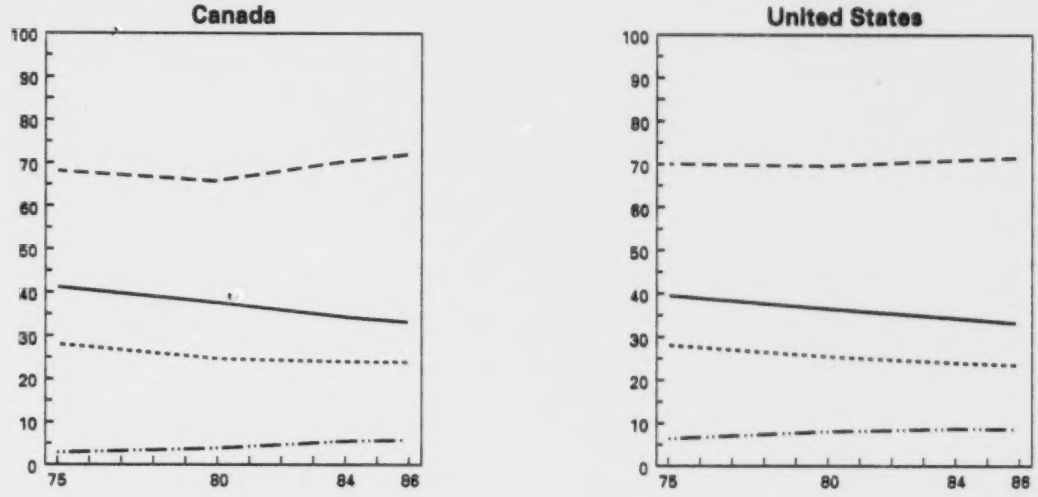
As mentioned in the sections dealing with second level-second stage and third level, certain countries have a variable proportion of pupils and/or students in part-time education. In 1986, part-timers as a proportion of the total population in education amounted to almost 20 per cent in Switzerland, between 10 and 15 per cent in the Netherlands, Austria, New Zealand and the United Kingdom. Germany would also come into this category if, like other countries, it treated apprenticeship as a form of part-time education. The proportion exceeded 5 per cent in Canada, Luxembourg and the United States and was very low elsewhere. In all the other countries for which data are available and comparable for the four reference years, the proportion has increased since 1975, except in Japan and Yugoslavia.

Graph III

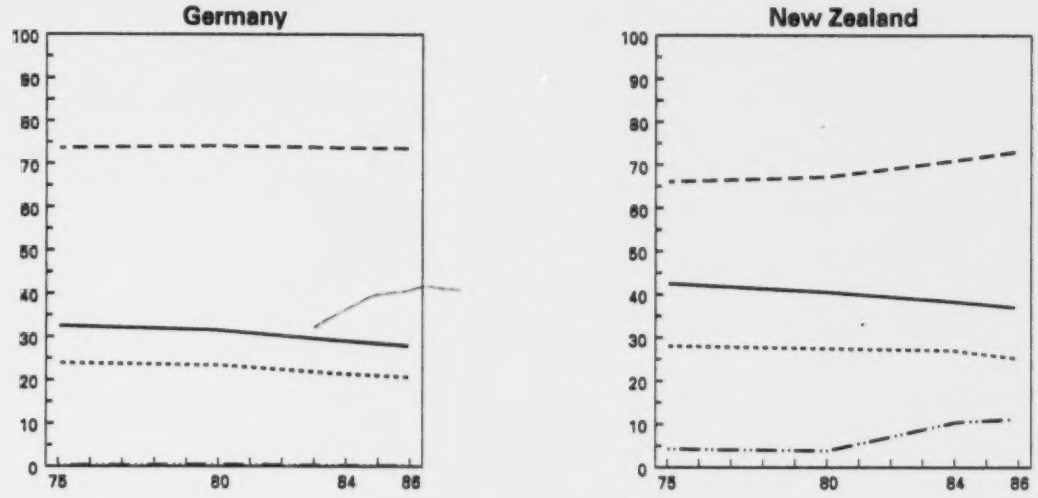
School-age population and actual enrolments

(as a percentage of total population)

A. Decrease in school-age population > 15 per cent and decrease in numbers enrolled: Netherlands, Finland, Portugal, United States, Canada.



B. Decrease in school-age population 10 13 per cent and decrease in numbers enrolled: Australia, New Zealand, Switzerland, Belgium, Germany.



School-age population (3-24)

Participation rates

Enrolments

Share of part-time enrolments

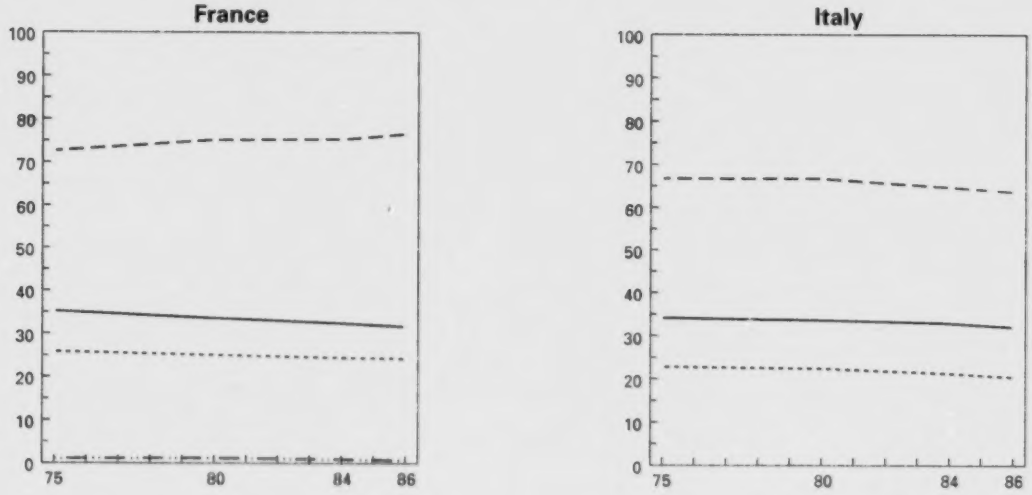
To conclude, between 1975 and 1986 all but the group D countries were enabled by their demographic patterns to increase overall participation rates without increasing numbers. According to the *United Nations Demographic Yearbook*, taking the medium assumption, the number of births can be expected to go on declining for the five-year periods from 1985 to 2000 in about half the OECD countries and to level off or increase in the others. As a result, for an equivalent increase in the overall participation rates, the countries in the second group will need to make a far greater financial commitment than those in the first group, and one that will have to be increased steadily as the bigger classes reach the education system's higher levels.

Graph III *(continued)*

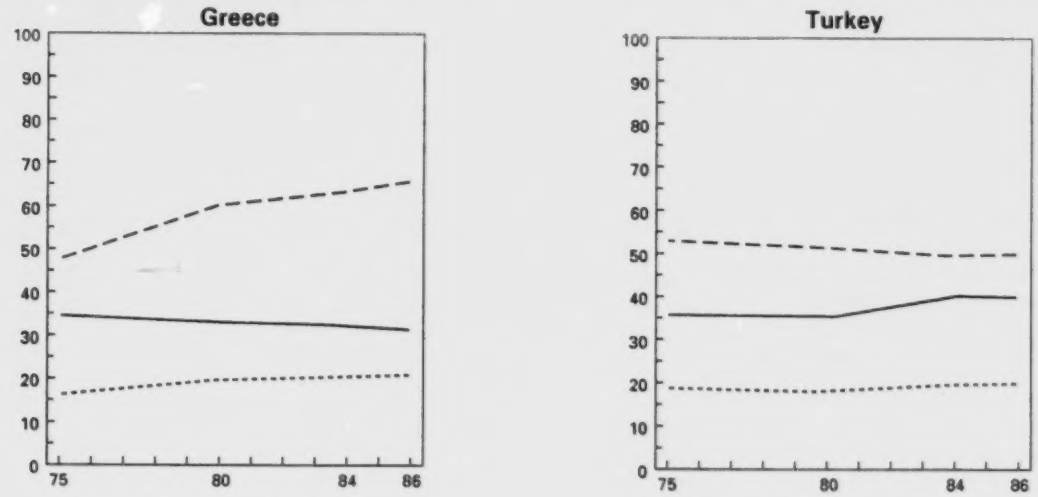
School-age population and actual enrolments

(as a percentage of total population)

C. Decrease in school-age population < 10 per cent and decrease in numbers enrolled: Denmark, Yugoslavia, France, Austria, United Kingdom, Italy, Luxembourg.



D. Decrease in school age population < 10 per cent and increase in numbers enrolled: Greece, Ireland, Japan, Norway, Spain, Sweden, Turkey.



School-age population (3-24)

Participation rates

Enrolments

Share of part-time enrolments

IV. ENROLMENT RATES

Chapters I and II looked in some detail, for each level of education, at comparative trends in numbers, the population of a given age group and participation rates. The latter were seen to be affected by, among other factors, the choice of age group which did not correspond in all cases to the normal or actual duration of the various levels of education. To remedy that difficulty, enrolment rates, i.e. that proportion of the population of a given age receiving education of whatever type or level, are frequently compared. But those rates themselves conceal the structural differences of national education systems. It was decided to investigate the rates for three key ages, 17, 19 and 21 which highlight these differences. No purpose would probably be served by repeating this exercise for all ages, especially as the data are incomplete, those for 1975 and 1980 particularly so.

IV.1. ENROLMENT RATES AT AGE 17

At age 17 full-time compulsory schooling has ended in all countries and practically all young people still in the system are in second level education; very few have already entered third level. In 1986 rates exceeded 85 per cent in Sweden, Belgium, the Netherlands, the United States, Japan and Germany, ranged from between 75 and 85 per cent in Denmark, Norway, Austria (1984), Canada, France and Switzerland and around 65 per cent in Ireland and Yugoslavia. In Australia, the United Kingdom and Italy they were slightly below 50 per cent and in Turkey and Portugal below 40 per cent.

In every country but Greece for which data are available, enrolment rates have risen since 1975, mainly between 1975 and 1980. The rise was particularly marked in Finland, Sweden and Denmark. However, there has been a downward trend since 1980 or 1984 in Austria, Italy, Japan and Yugoslavia.

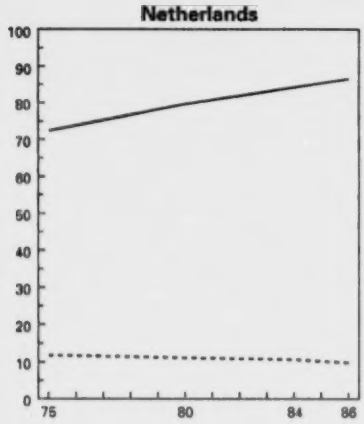
But the situation of the pupils covered in calculating these rates may be very dissimilar. In the first place, because of the effect of repeating, some pupils may be in a lower-than-normal study year. In certain countries, age 17 is the last secondary year preparing for entry to third level, whereas elsewhere 17 year-olds may still have one or even two secondary years to complete. It must also be borne in mind that education at this level may be more or less diversified, and alongside secondary education preparing for entry to third level, there may be other shorter or longer programmes, usually leading to occupational qualifications. But where the greatest differences are to be found is that some countries offer part-time education alongside full-time education, and in particular, apprenticeships. The number of 17 year-olds in part-time education can vary extensively. In 1986, the proportion of 17 year-old part-timers in overall enrolment rates was only a few percent in Japan, New Zealand and Norway and not much more in Belgium, and between 10 and 15 per cent in the Netherlands and France. But it exceeded 20 per cent in Australia and Luxembourg, 30 per cent in the United Kingdom, 50 per cent in Austria and Germany (*N.B.:* although Germany now regards apprentices as full-time pupils and they are shown as such in the tables in the annex, for the purposes of this analysis and for the sake of comparison with other countries they are treated here as part-time) and 67 per cent in Switzerland. In Germany, Japan and the Netherlands the proportion of part-timers declined slightly by comparison with 1975, but was a little larger in Norway and Switzerland. For the other countries, 1975 and 1980 figures are not available.

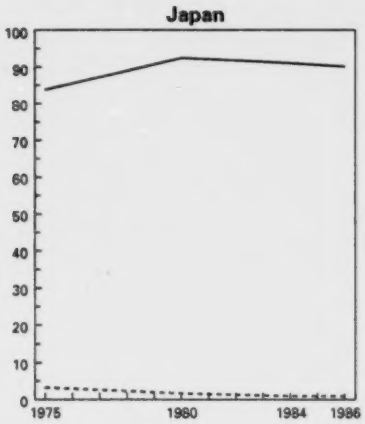
IV.2. ENROLMENT RATES AT AGE 19

Age 19 enrolment rates are well below the age 17 rates in all countries except the United Kingdom and Yugoslavia. In the latter country, in 1986, the rate was 69 per cent, probably because Yugoslavia offers second level and non-university third level occupational programmes of varying lengths and a 19 year-old can enrol in more than one of them in any given year. In the other countries, the age 19 participation rate in 1986 was between 52 and 57 per cent in Denmark, the Netherlands, Belgium, Switzerland and Germany, slightly under 50 per cent in the United States and the

Graph IV

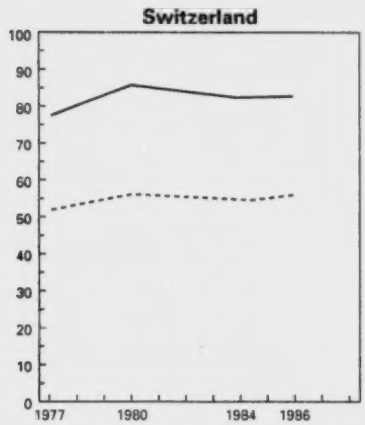
Enrolment rates (%)



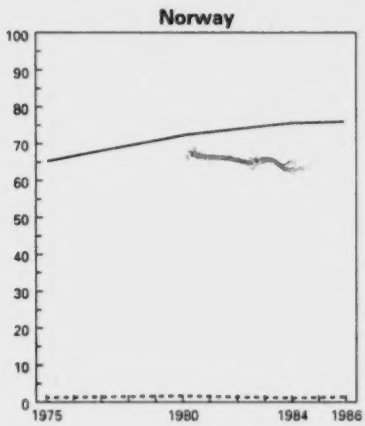


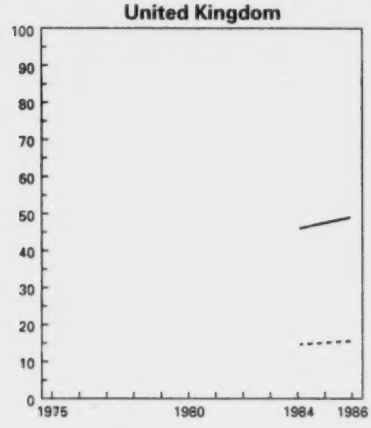
A. 17 year-olds

a) Rates > 85 per cent:
Sweden, Belgium, Netherlands, United States, Japan, Germany.

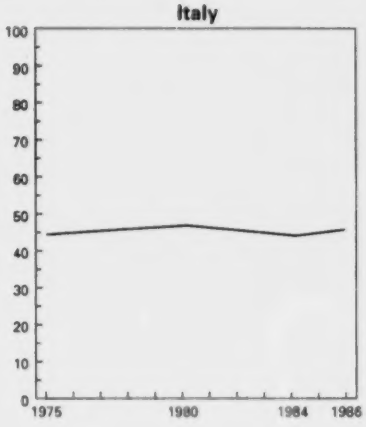


b) Rates > 75 < 85 per cent:
Denmark, Norway, Austria, Canada, France, Switzerland.





c) Rates 65 per cent:
Ireland, Yugoslavia, Australia, Greece, Italy, Luxembourg, New Zealand, Portugal, Spain, Turkey, United Kingdom.



——— Total rate

------- Rate in part-time education

United Kingdom, and slightly over 40 per cent in Canada, France and Sweden. By contrast, fewer than one-third of 19 year-olds were still pursuing education in Finland (full-time only), Norway and Greece and fewer than a quarter in Ireland (full-time only) and New Zealand. In all those countries other than Greece and Norway for which 1975 and 1980 data are available, enrolment rates rose. In Germany, the Netherlands, Denmark, Sweden and Yugoslavia the rise was particularly marked.

But here again, these rates mask very different situations. In most countries, those pupils whose schooling has followed the normal pattern will have completed their general or technical secondary education preparing for third level, but the proportion of pupils lagging behind, either during the second level-second stage or earlier, may be large or small and may also vary according to whether second level-second stage ends at age 19, 18 or 17. Another point is that some secondary leavers may be postponing entry into third level, either to discharge a military service obligation (e.g. in Germany) or to obtain some work experience (this is encouraged in Sweden) or for some other reason.

Although 19 year-olds have normally completed education preparing for entry to third level, not all will necessarily have completed the various kinds of second level courses, full-time or, especially, part-time, leading to a final occupational qualifications. It therefore seemed interesting to ascertain what proportion of 19 year-old enrolments were in second level education of whatever kind. In 1986 this proportion amounted to or exceeded 90 per cent in Germany, Switzerland and Denmark, 70 per cent in the Netherlands, Sweden, Norway, Finland, Luxembourg and Yugoslavia. In all these countries either part-time education is extensive or full-time second level education ends at a relatively higher age than in other countries, or the two factors are combined. At the other end of the scale, the proportion is slightly over 40 per cent in Belgium and France, between 15 and 30 per cent in New Zealand, Canada, the United Kingdom and Greece and below 10 per cent in the United States. In most countries it is tending to decline. Enrolment rates at age 19 do not have the same significance, depending on whether the majority of students are in second level or third level.

IV.3. ENROLMENT RATES AT AGE 21

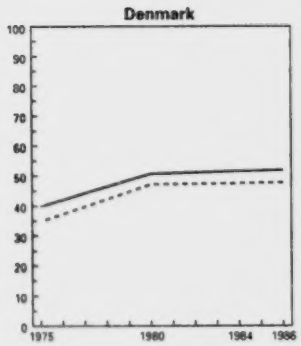
Between the ages of 19 and 21 enrolment rates decline appreciably, except in Finland where in 1986 they were higher at age 21. In 1986 enrolment rates exceeded 30 per cent only in Belgium, Finland, the Netherlands. They approached 30 per cent in the United States and Denmark. In Canada, Germany and Norway the rates were around 25 per cent and in France and Switzerland around 20 per cent. They have generally increased since 1975 except in Greece and Norway. Between 1984 and 1986 the enrolment rate levelled off in Switzerland and declined slightly in the United States. In Finland and Germany enrolment rates rose by over 50 per cent and in the Netherlands the rate more than doubled.

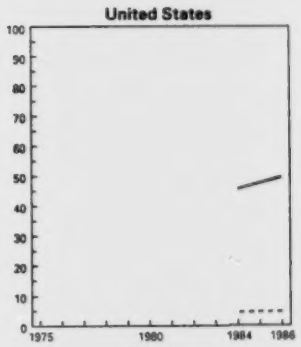
It may be thought that 21 year-olds still in education are in third level. While that is true for certain countries such as Canada, France, Greece, Ireland, New Zealand and the United States, it is not necessarily so elsewhere where an appreciable proportion of 21 year-olds are still in second level education. In 1986 that proportion exceeded 50 per cent in Denmark and Finland, was between 40 and 50 per cent in Switzerland, Sweden, the Netherlands and Germany, and just over 30 per cent in Norway. In contrast to the pattern for the 19 year-olds, the proportion is tending to increase.

To conclude, when comparing enrolment rates internationally it is even more important here than with other educational indicators to take account of structural differences in the various education systems, and to avoid drawing hasty conclusions from just the figures by themselves about enrolment levels in any one country compared with another.

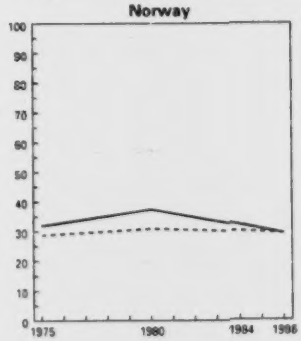
Graph IV *(continued)*

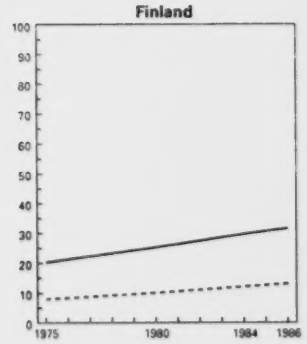
Enrolment rates (%)

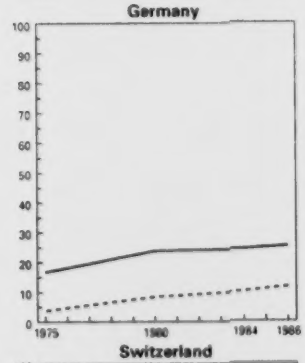




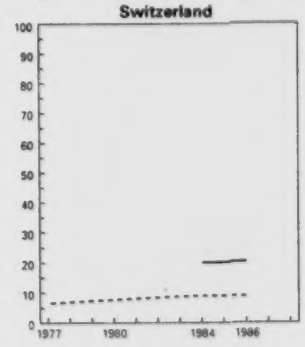
b) Rates < 45 per cent: Austria, Canada, Finland, France, Greece, Ireland, Luxembourg, New Zealand, Norway, Portugal, Sweden.







b) Rates 20 per cent: Austria, France, Greece, Ireland, New Zealand, Portugal, Sweden, Switzerland, Yugoslavia.

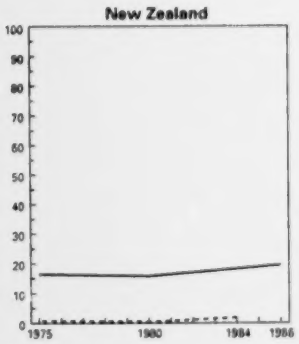


Total rate

Rate in second level education

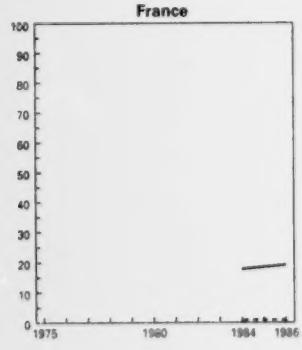
B. 19 year-olds

a) Rates 49 per cent: Belgium, Denmark, Germany, Netherlands, Switzerland, United Kingdom, Yugoslavia.



C. 21 year-olds

a) Rates 24 per cent: Belgium, Canada, Denmark, Finland, Germany, Netherlands, Norway, United States.



V. FEMALE PARTICIPATION

In pre-primary, first level and second level-second stage, the proportion of girls is very much the same as it is in the corresponding age group, i.e. about 49 per cent, except in Turkey for the first stage of second level where, although female participation has been constantly increasing since 1975, the proportion had yet to reach that level in 1986. It has therefore seemed unnecessary to study the trend. The pattern is altogether different in second level-second stage and third level and in the different types of education these comprise.

V.1. SECOND LEVEL-SECOND STAGE EDUCATION

In second level-second stage education overall, female participation varies quite appreciably, depending on whether or not part-time education is available. In six of the twelve countries where it is, girls were slightly under-represented, in 1986, in the Netherlands and New Zealand, and more so in Australia, Switzerland, Austria and Luxembourg at between 43 and 46 per cent. In the other countries, Japan, Belgium, France, Norway, Ireland and the United Kingdom, the proportion varied from 49 to 51 per cent. In all countries for which data have been available since 1975, female participation has risen except in Japan and France where it has remained more or less steady.

In countries having no part-time education, girls and boys were equally represented in 1986 in Canada. Girls were slightly over-represented in Italy and the United States, a little more so in Sweden and Spain and very much so (56 per cent) in Finland. They were under-represented in Yugoslavia, Greece and especially Turkey (37 per cent), also in Denmark and in Germany. In Germany, though, unlike the other countries, apprenticeship counts as full-time vocational/technical education. Since 1975 the proportion of girls remained more or less steady in Canada and the United States. It rose in all countries up to 1984, thereafter levelling off except in Greece and Sweden where it shrank.

Female participation in second level-second stage education is as a rule higher in those countries with no part-time education and the differences are still more marked if female participation rates in the various types of education are compared. Section I.4 showed that the share of each of these types of education in the total varied considerably. So diagrams are given that are representative of each situation, i.e. among countries offering part-time education, those where it occupies a substantial position and those in which it is relatively less significant; and among countries with no part-time education, those in which vocational/technical education predominates and others in which general education is more widespread.

In general education, girls are over-represented in the great majority of countries, the exceptions being Canada and the United Kingdom where the proportion is the same as in the age group, Austria where girls are slightly under-represented and in Turkey where they are still in a minority although the situation has very much improved since 1975. But the pattern differs substantially from one country to another. In 1986, 50 per cent of pupils in Germany and New Zealand were girls, as they were, too, in the United States and Australia in comprehensive education (treated here as general education), whereas in Finland the proportion was 60 per cent and in Sweden 64 per cent. In all countries the proportion of girls increased until 1984, more especially between 1975 and 1980, the only exceptions being Canada, the United Kingdom and Austria where it did not change. Following 1984 female participation remained steady or even declined in most countries.

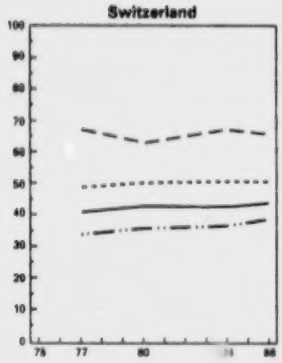
Young women are also over-represented in vocational/technical education in Austria, Finland, the United Kingdom, and especially in Ireland, New Zealand and Switzerland where vocational/technical education accounts for only a small or very small proportion of total enrolments. In the other countries, the proportion is between 44 and 49 per cent (much lower in Greece and Turkey). Since 1975, the increase in the proportion of girls in vocational/technical education has on the whole been smaller than for general education, except in Finland and Norway. It was however substantial in Italy, Luxembourg, the Netherlands and, especially, Greece. In Spain, it was the same in vocational/technical as in general education.

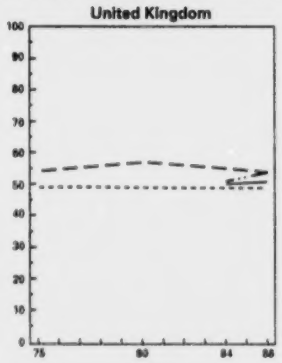
Female participation in part-time education is generally low, under 40 per cent in 1986, except in Belgium and the United Kingdom where young women outnumber young men and in the Netherlands where numbers are about the same. In all countries except Japan the proportion of girls rose, often steeply, between 1975 and 1986. It is noteworthy that

Graph V. 1

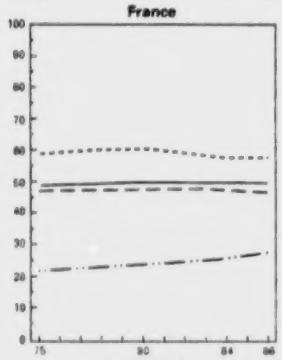
Female participation in second level - second stage education

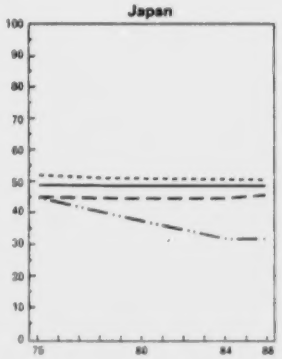
(as a percentage of total enrolments)



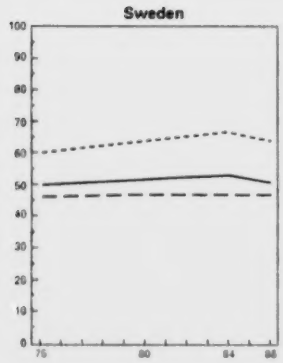


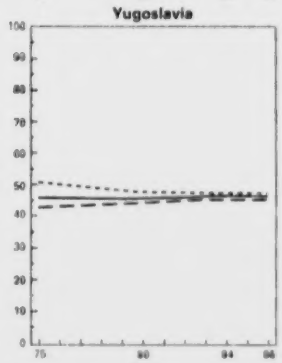
A. Significant part-time education: Switzerland, Austria, United Kingdom, Netherlands.



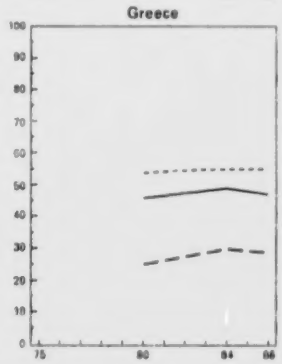


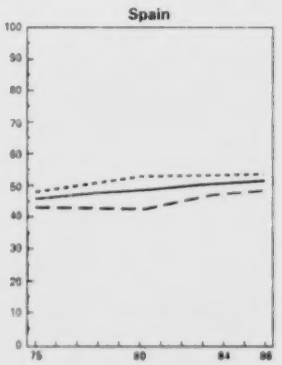
B. Small part-time education: Japan, Norway, France, Ireland, Belgium, Australia, Luxembourg, New Zealand.





C. No part-time education but important vocational/technical sector: Finland, Yugoslavia, Sweden, Italy, Germany, Denmark.





D. No part-time education but important general education sector: Turkey, Spain, Greece.

Total second level-second stage
General
Vocational/technical
Part-time

- the countries in which part-time education is widespread, i.e. Austria, the Netherlands, New Zealand, Switzerland and the United Kingdom are, with the exception of the Netherlands, the countries in which young women are relatively better represented in vocational/technical education than in general education. The same would also apply to Germany if that country treated apprenticeship as part-time education.

To conclude, while female participation in second level-second stage education has been increasing it has been doing so largely in general education where girls are over-represented, sometimes very much so, whereas they are still a minority in vocational/technical education, especially part-time. Disproportions would certainly seem to be much greater if the different options or streams within each type of education were considered.

V.2. THIRD LEVEL EDUCATION

The proportion of young women in third level education overall reached or exceeded 49 per cent in 1986 for half the countries studied, having considerably advanced since 1975, by 10 percentage points or more in four countries. But it was still low (under 40 per cent) in Switzerland, Turkey and Japan, and not much higher in Germany. The charts illustrate countries grouped according to the scale of female participation. But just as for second level-second stage education, female participation is not uniform. It varies between levels 5, 6 and 7. In level 5, in 1986 female students were in a majority, or equal in number to male students in 14 of the 21 countries and represented nearly two-thirds or more of all students in four countries (85 per cent in Japan). Conversely, in Switzerland and Turkey, they accounted for one-third or less of the total, and in the other countries, for between 43 and 47 per cent. In Spain, where level 5 is practically non-existent, the differences in the male/female numbers is insignificant. In all countries, female participation rose after 1975 at least until 1984, except in Denmark, in France and in Norway where it declined after 1980.

At level 6 (or levels 6 and 7 in countries which do not distinguish between the two) the proportion of female students had by 1986 (for some countries, 1984), reached 49 per cent in eight of the 23 countries, but was still under 40 per cent in Belgium, Germany, the Netherlands, Switzerland and Turkey and particularly low in Japan (25 per cent). It rose in all countries except Sweden, Germany, the United Kingdom and the United States where it remained steady between 1984 and 1986.

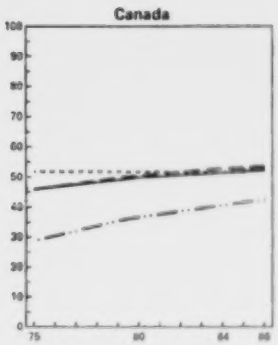
At level 7, in those countries distinguishing this from level 6, there were far fewer females than at levels 5 and 6 – no more than 40 per cent in five out of the 14 countries (Ireland, Finland, Canada, New Zealand and the United States), 30 per cent or less in Sweden, Switzerland and Austria and under 15 per cent in Japan. The proportion has however been constantly rising (a fall in Ireland being due to a change in classification).

So young women are participating in ever greater numbers at every level of third level education. At level 6 in particular, they outnumber male students in a great many countries. But this increase in fact masks some persisting inequalities where choice of study area is concerned. These will be highlighted in the *Supplement* to this publication.

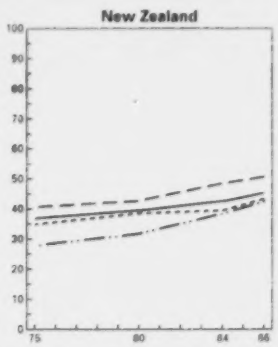
Graph V. 2

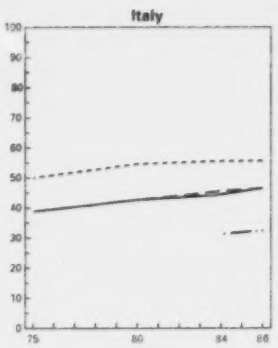
Female participation in third level education

(as percentage of total enrolments)

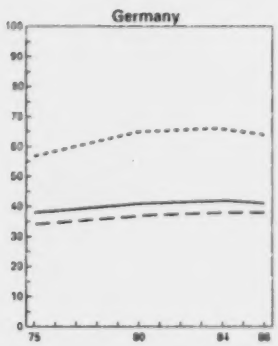


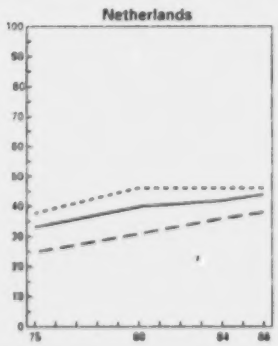
A. Proportion of women in total > 50 per cent: Canada, Denmark, Finland, France, Ireland, Norway, Spain, Sweden, United States.



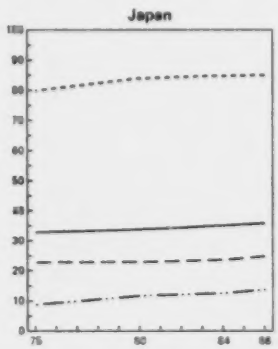


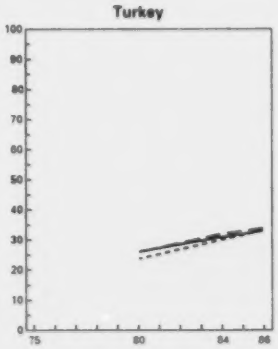
B. Proportion of women in total > 45 < 50 per cent: Belgium, Australia, Greece, Italy, New Zealand, United Kingdom, Yugoslavia.





C. Proportion of women in total > 40 < 45 per cent: Germany, Netherlands, Austria.





D. Proportion of women in total < 40 per cent: Japan, Switzerland, Turkey.

——— Total

------- Level 5

– – – Level 6 (levels 6 and 7 for Germany, the Netherlands and Turkey)

·—·—· Level 7

VI. PRIVATE EDUCATION

The International Standard Classification of Education defines private education as that provided in institutions managed by private persons. This definition covers a wide variety of situations. Some private institutions are wholly funded by the State, others are state-aided to a wide variety of degrees while others again receive no state aid at all. In any one country, too, the situation may vary over time or according to level or type of education. Only a detailed study of arrangements for financing private education would make it possible to draw comparisons between countries. The analysis here is concerned with the trend at every level of education and charts show countries where the share of private education is large, sometimes at every level, or very large at a particular level. Belgium and the Netherlands, where both private and public education are wholly state-funded, are not included though it is noteworthy that in both those countries, "private" education takes a larger share than public education at every level.

VI.1. PRE-PRIMARY EDUCATION

In Canada, Denmark, Greece, Ireland, Luxembourg, Switzerland, Turkey and the United Kingdom under 10 per cent of pre-primary pupils attended a private institution in 1986. The proportion had not varied much since 1975, except in Ireland where from a very low level it had fallen to practically nothing and in Greece where it fell very sharply. In France the proportion remained virtually unchanged at 13 per cent, and in the United States, at 19 per cent, it was up on 1975. In the other countries, Italy, Norway, Spain and Japan, the proportion in 1986 ranged from 32 per cent to 76 per cent. In Japan it changed little and in the other countries it fell steeply, especially between 1975 and 1980.

VI.2. FIRST LEVEL AND SECOND LEVEL-FIRST STAGE

These stages more or less correspond to compulsory schooling. The share of private education is extremely small (from 1 to 6 per cent) in the great majority of countries and has not varied much over time except in Greece and New Zealand where it has shrunk. The exceptions are Denmark and the United States (12 per cent), and France (17 per cent), these three countries reporting a slight increase, and above all, in 1986, Spain (35 per cent, down on 1975) and Australia (26 per cent, up on 1984).

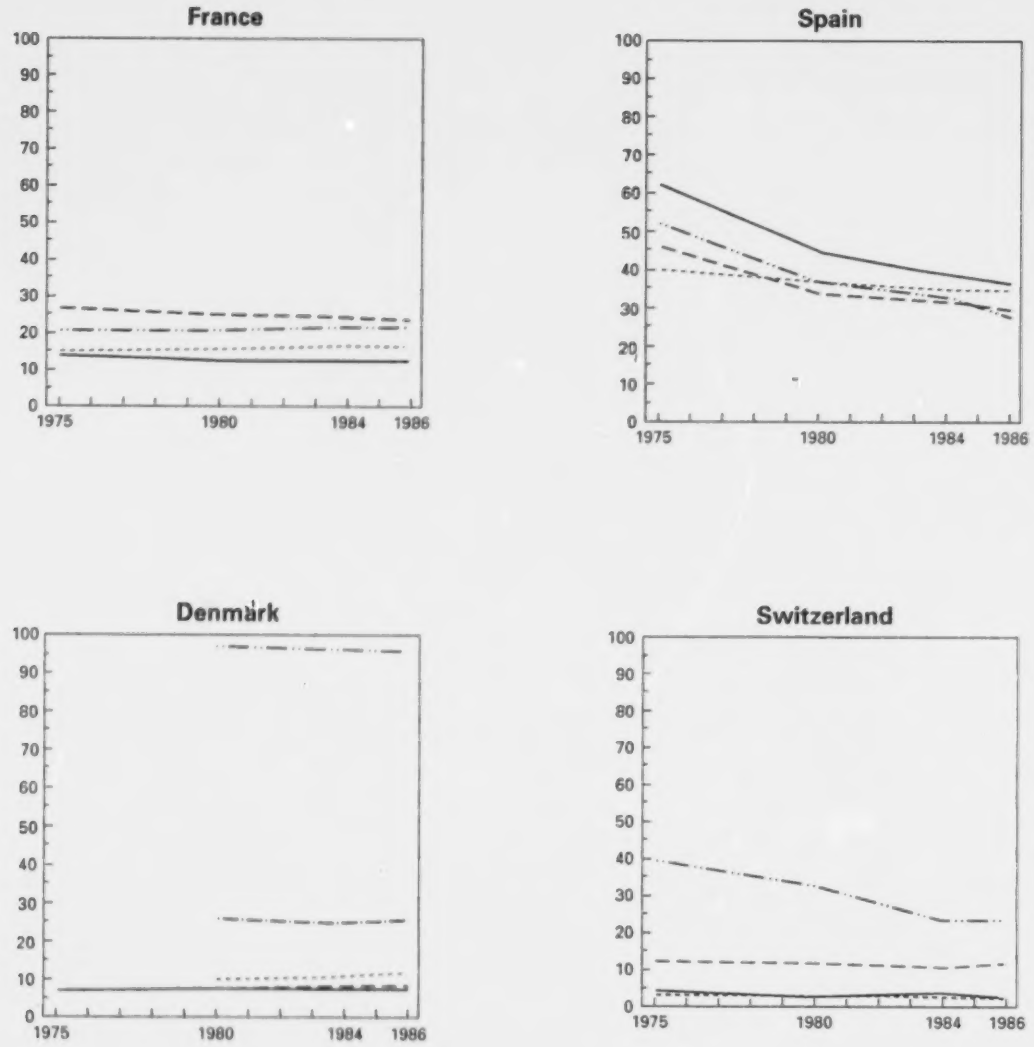
VI.3. SECOND LEVEL-SECOND STAGE EDUCATION

The share of private education in 1986 was very low (10 per cent or under) in over half the countries in the survey, i.e. the United States, Germany, the United Kingdom, Denmark, Norway, Canada, New Zealand, Luxembourg, Greece, Sweden and Turkey. No appreciable change has occurred in those countries since 1975 except for a decline between 1975 and 1980 in Luxembourg and Turkey, and in Norway and New Zealand between 1980 and 1984. In 1986 the proportion was between 11 and 15 per cent in Austria, Switzerland and Italy, with little change over time in Austria and Switzerland but an increase in Italy by comparison with 1975. Private education attracted from 25 to 30 per cent of pupils in France, Japan and Spain (also in Australia whose data relate only to 1984 and 1986); in all three countries, and especially in Spain, these percentages are down on 1975.

Graph VI

Private education

(as a percentage of total enrolments in each level of education)



VI.4. FULL-TIME SECOND LEVEL-SECOND STAGE VOCATIONAL/TECHNICAL EDUCATION

In 1986 the share of private education was very low (under 10 per cent) in Sweden, Ireland, Germany, Italy, Norway and Greece; fairly low in Luxembourg and Finland, zero in Turkey and Yugoslavia. By contrast, in France, Austria, Switzerland, Japan and Spain it was over 30 per cent. Denmark, with almost all pupils in private education, is an exceptional case. Since 1975 there has been little change overall, though private education lost ground in Austria, Greece, Switzerland and Spain.

VI.5. THIRD LEVEL EDUCATION

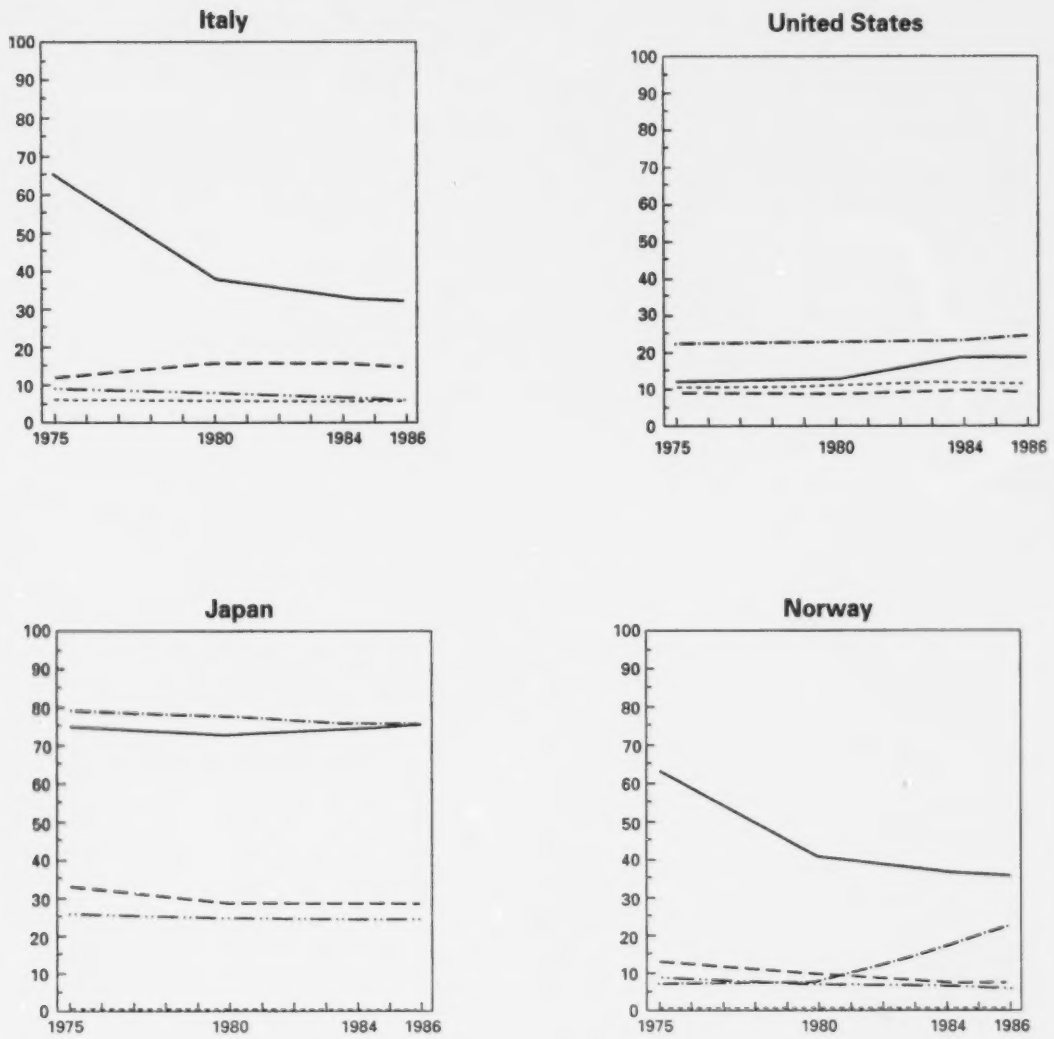
Only half the countries provided data on third level education, some for several years, some for 1986 only, and it has not been possible to ascertain whether the other countries have no private third level education at all or merely collect no data about it. For Austria, Germany and Spain the data are drawn from their reply to the questionnaire on third level education in 1986. In Austria, Ireland, Greece and Sweden, the proportion of students attending a private institution is negligible (3 per cent or under); in Germany, Spain and Italy it is slightly higher (from 6 to 10 per cent). In the other countries the proportion is by no means negligible, slightly under 20 per cent and rising in Portugal, a fairly steady 25 per cent or so in the United States and Denmark. In Norway, too, at 25 per cent the proportion has more than tripled since 1975. In Japan, it is over 75 per cent, though the trend is downward.

To conclude, with few exceptions, first level and second level-first stage education are predominantly public sector, as is second level-second stage, both general and vocational/technical though to a lesser extent. Differences between countries are most marked in pre-primary and third level education. However, in pre-primary education the private sector is tending to decline in most countries, whereas in third level education, though the historical data are scarce, it is steady or rising.

Graph VI *(continued)*

Private education

(as a percentage of total enrolments in each level of education)



VII. SECOND LEVEL-SECOND STAGE QUALIFIED STUDENTS AND NEW ENTRANTS INTO THIRD LEVEL EDUCATION

VII.1. TREND IN THE NUMBERS QUALIFYING FOR, AND NEW ENTRANTS TO, THIRD LEVEL

Given the fact that, in most countries, possession of a second level qualification is still a necessary, if not the only, requirement for access to third level education, the trend in the number of second level-second stage qualified students is here compared with the number of new entrants into third level education. Unfortunately, the figures for the number of qualified students are completely unavailable for certain countries and, in the case of others, available only for 1984 and 1986. What is more, in the case of Denmark, Finland, Italy, the Netherlands, Turkey and Yugoslavia they include qualifications – for the most part credentialling technical and vocational courses – which do not allow access to third level education. In the nine countries for which figures are available from 1975 (1980 in the case of Denmark), the numbers qualifying rose sharply up until 1984 except in the United States. Between 1984 and 1986 there was a drop in Finland, New Zealand, Sweden and the United Kingdom and a continuation of the downturn in the United States.

The number of new entrants – about whom more complete information is available – also rose up until 1984 except in Japan, where it remained virtually unchanged. From 1984 to 1986 the figure continued to rise, except in Italy, the Netherlands, the United States and Yugoslavia. Of the nine countries for which data are available since at least 1980, the increase up to 1984 was primarily in level 6 in Germany, the Netherlands, the United States and Yugoslavia, and in level 5 in Austria, Denmark, Finland, Greece and Japan, where the proportion of new entrants going into these respective levels rose during this period (Italy and Spain, where level 5 is virtually non-existent, have not been taken into account in this case). From 1984 to 1986 the proportion going into level 5 declined in six out of twelve countries, remained substantially the same in another three and increased only in Finland, Japan and Sweden.

VII.2. NUMBERS QUALIFYING FOR, AND NEW ENTRANTS TO, THIRD LEVEL AS A PROPORTION OF AN AGE GROUP

As in the case of the school population as a whole, demographic trends are having an effect on the number of second level qualified students and new entrants into the third level.

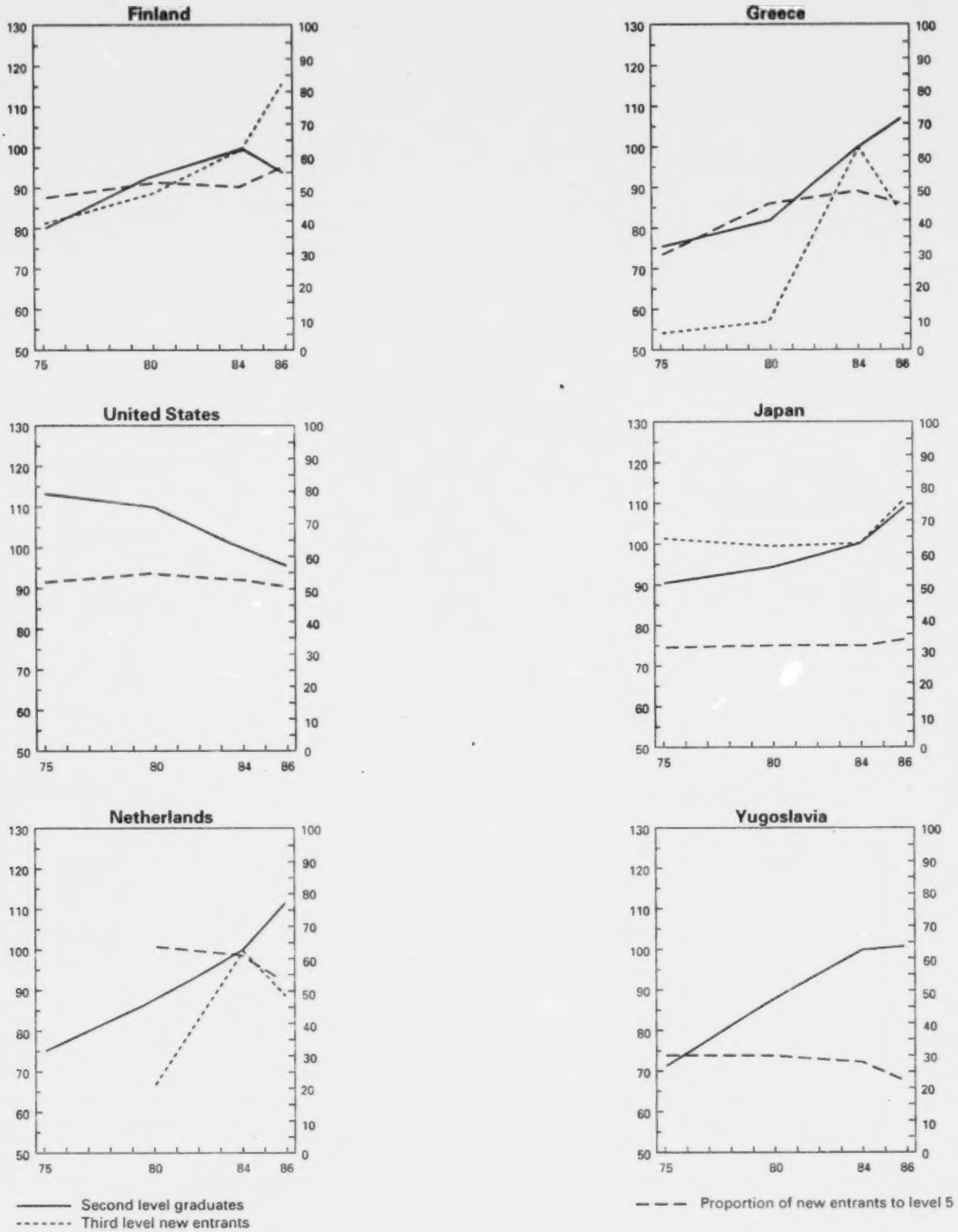
In order to eliminate this factor, both of these figures have been related to the total number of persons in the corresponding age group, on the assumption that there was no break between the end of secondary and entry into higher education. Although the age groups that were taken, which are shown in Table 5.3 of Part B of this study, correspond to those of the qualified secondary students, this is not entirely true for new entrants due to the fact that a proportion of them are older – a proportion, moreover, that can vary not only from country to country but also from one period to another.

In all of the countries the proportion of an age group obtaining a second level-second stage qualification, irrespective of the type of qualification considered, increased between 1975 (or the first year for which figures are available) and 1984, except in the case of the United States between 1975 and 1980. Between 1984 and 1986 the figure declined in Denmark, Japan, New Zealand, Sweden and the United States. The increase was particularly substantial, over 40 per cent, in Greece, the Netherlands and Yugoslavia. The differences between countries, however, are considerable, even excluding those where the number of secondary students is overstated due to the fact that qualifications not giving access to the third level are included: in 1986, the figure ranged from 25 per cent in Austria to over 70 per cent in the United States and Sweden, and close to 90 per cent in Japan.

The proportion of a particular age group entering third level education also rose in most cases. In New Zealand, Greece, Ireland, Finland and Portugal it rose by over 60 per cent. It was higher in 1986 than in 1975, except in Germany, Italy and Japan, but the trend has been fairly uneven, showing a fall between 1975 and 1980 in Denmark, New Zealand and more particularly in Germany, between 1980 and 1984 in Sweden, between 1984 and 1986 in

Graph VII. 1

Evolution of numbers qualifying at the end of second level - second stage education and of those entering third level



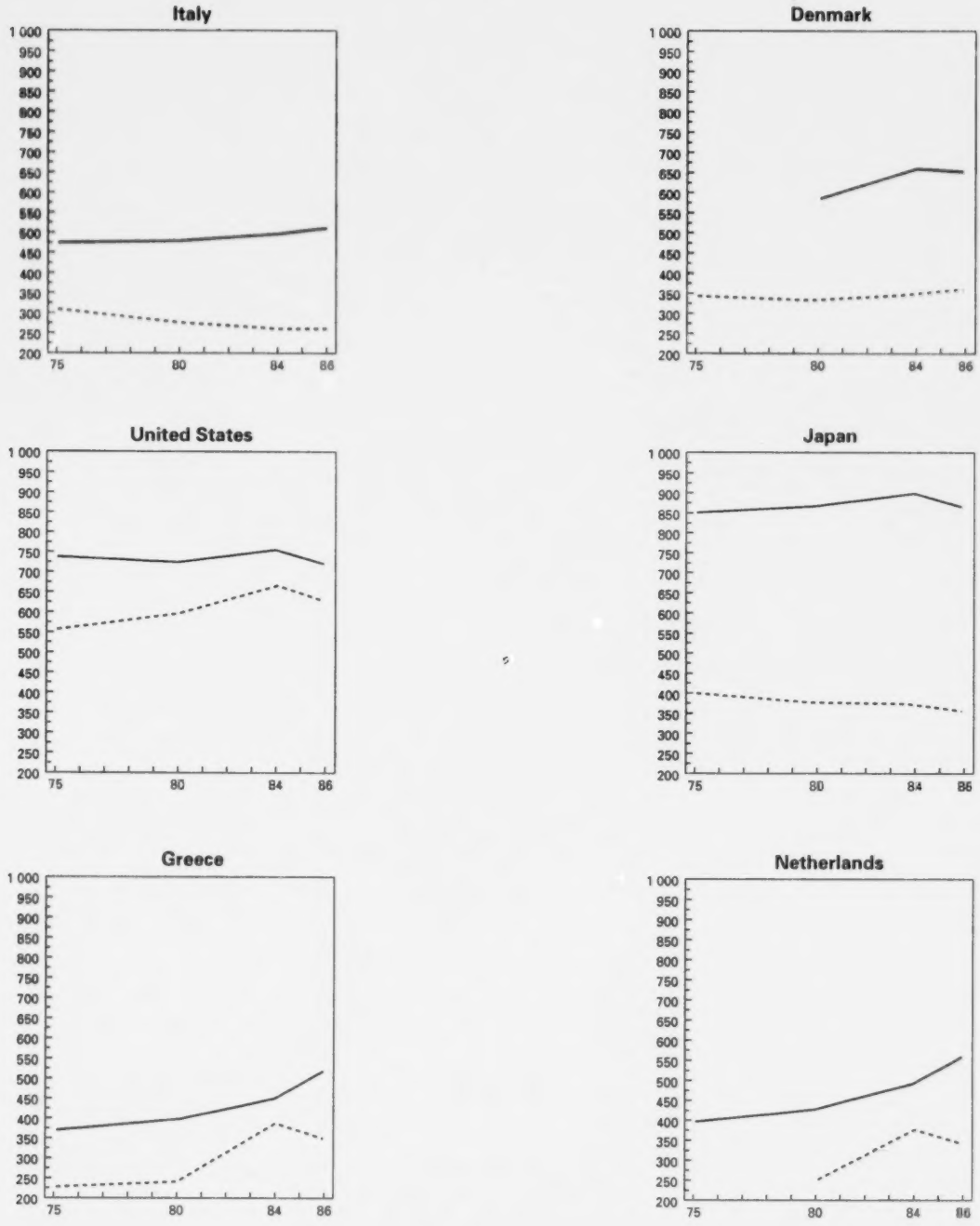
Greece, the Netherlands, the United States and Yugoslavia, and throughout all these periods in Italy and Japan. Except for those countries at either end of the scale, where this proportion is either very low (Turkey and Portugal: respectively 125 and 135 per thousand) or particularly high (United States and Sweden: respectively 625 and 701 per thousand), it is noticeable that the differences between countries are far less marked than in the case of second level qualified students, with the proportion in most cases ranging between roughly 25 and 40 per cent. Comparing the trend over the same period for the two figures in each country – although these periods may be different in view of the differing series available – it will be seen to have been more favourable for new entrants than for qualified secondary students, except in Austria, Denmark, Italy, Japan and Yugoslavia.

In short, despite the lack of complete series and, in some cases, of comparability between countries as regards those obtaining qualifications at second level, it is noticeable that both the proportion of an age group obtaining a second level qualification as well as the proportion entering third level education have risen, often sharply, and generally more sharply in the case of third level entrants. Accordingly, if the ratio between these two proportions can be considered as an indicator of the chances of a second level qualified student entering higher education, then these have increased, except in Austria, Denmark, Italy, Japan and Yugoslavia. Apart from those countries where the number of qualified secondary students is inflated by the inclusion of qualifications that do not give access to the third level, these chances in 1986 were close to or in excess of 90 per cent in every country except for Portugal and Greece (roughly 65 per cent) and Japan (just over 40 per cent), the country with the highest proportion of second level graduates.

Graph VII. 2

Numbers of those qualifying at the end of second level and of those entering third level as a proportion of the age group

(‰)



VIII. THIRD LEVEL GRADUATES

Third level education leads to three types of qualification: those of level 5, frequently of a vocational character and usually a final qualification even though, by means of switching or systems of equivalences, some students may go on to level 6 courses leading to a full first university degree which, in principle, is the only type of qualification which allows them to undertake post-graduate studies for a level 7 qualification. The numbers of those qualifying at each level as a proportion of the total for the three levels differ widely from country to country and this has determined the way countries have been classified. In this case too, since demographic factors play an important role, we shall be looking at the trend both for the number of graduates and for the proportion of a notional age group obtaining these qualifications. (For the ages taken in the case of each country and each type of qualification, see Table 5.3 in Part B of this report.)

VIII.1. LEVEL 5 GRADUATES

In five countries – Belgium, Finland, Sweden, Norway and the Netherlands – the number of those qualifying at level 5 in 1986 represented between 50 and 70 per cent of the total. Since 1975 this figure has been steadily rising in Finland and falling in Norway; in the other three countries it has fluctuated and in 1986 was running at roughly its level in 1975 (1980 in the case of Sweden). In Belgium and the Netherlands the number of graduates has increased by about 50 per cent and the proportion of the reference age group qualifying at this level has also increased, virtually at the same pace in Belgium but less rapidly in the Netherlands. In Finland, the number and the proportion have both risen, with the proportion showing a steeper rise. In Norway and Sweden the number of graduates has fluctuated and the 1986 figure was below that for 1975 in Norway and below that for 1980 in Sweden; in both countries there has been a fairly marked drop in the proportion of the reference age group obtaining a qualification.

In Germany, the United Kingdom, France, Greece, Yugoslavia and Denmark the number of level 5 graduates in 1986 represented between a third and half of the total. Since 1975 this figure has increased sharply in Greece, less sharply in Denmark but has decreased in Yugoslavia and Germany. In France and the United Kingdom it was substantially the same in 1984 and 1986, the only years for which figures are available. In Greece the number of graduates rose until 1986 (when it was more than twice the 1975 level), in Yugoslavia until 1980 and in Denmark from 1980 to 1984, since when it has fallen. In Germany it fell between 1975 and 1980, recovered but then fell once again; France and the United Kingdom showed a rise between 1984 and 1986. The proportion of the reference age group obtaining a level 5 qualification more than doubled in Greece, increased in Denmark until 1984 but far less sharply than the absolute numbers, increased more or less at the same pace in France and the United Kingdom between 1984 and 1986, and at a faster pace in Yugoslavia between 1975 and 1980. It declined steeply in Germany (25 per cent over the period as a whole), in Denmark between 1984 and 1986, and in Yugoslavia from 1980 onwards.

Of the qualifications awarded in 1986, between 20 and 31 per cent were level 5 qualifications in New Zealand, Turkey, the United States, Canada and Japan, and also in Austria and Ireland where the data are not comparable with those for previous years. In Japan this figure has varied only slightly since 1975; in the United States it has increased as it did in Canada until 1984 and in Turkey between 1984 and 1986; in New Zealand it fell between 1980 and 1984. In Japan the number of graduates rose during each period while the proportion of the reference age group acquiring such qualifications increased between 1975 and 1980, decreased from 1980 to 1984 but increased once again between 1984 and 1986; in New Zealand both figures fell sharply from 1980 to 1984 but rose thereafter. In Canada the proportion rose slightly less than the number of graduates until 1984, but continued to rise between 1984 and 1986 whereas the absolute number fell. In the United States the proportion increased on the whole faster than the number while in Turkey, between 1984 and 1986, the opposite happened. In Italy, Spain and Switzerland the number of graduates at level 5 is so small that any changes in this or their proportion of the reference age group are not of any great significance.

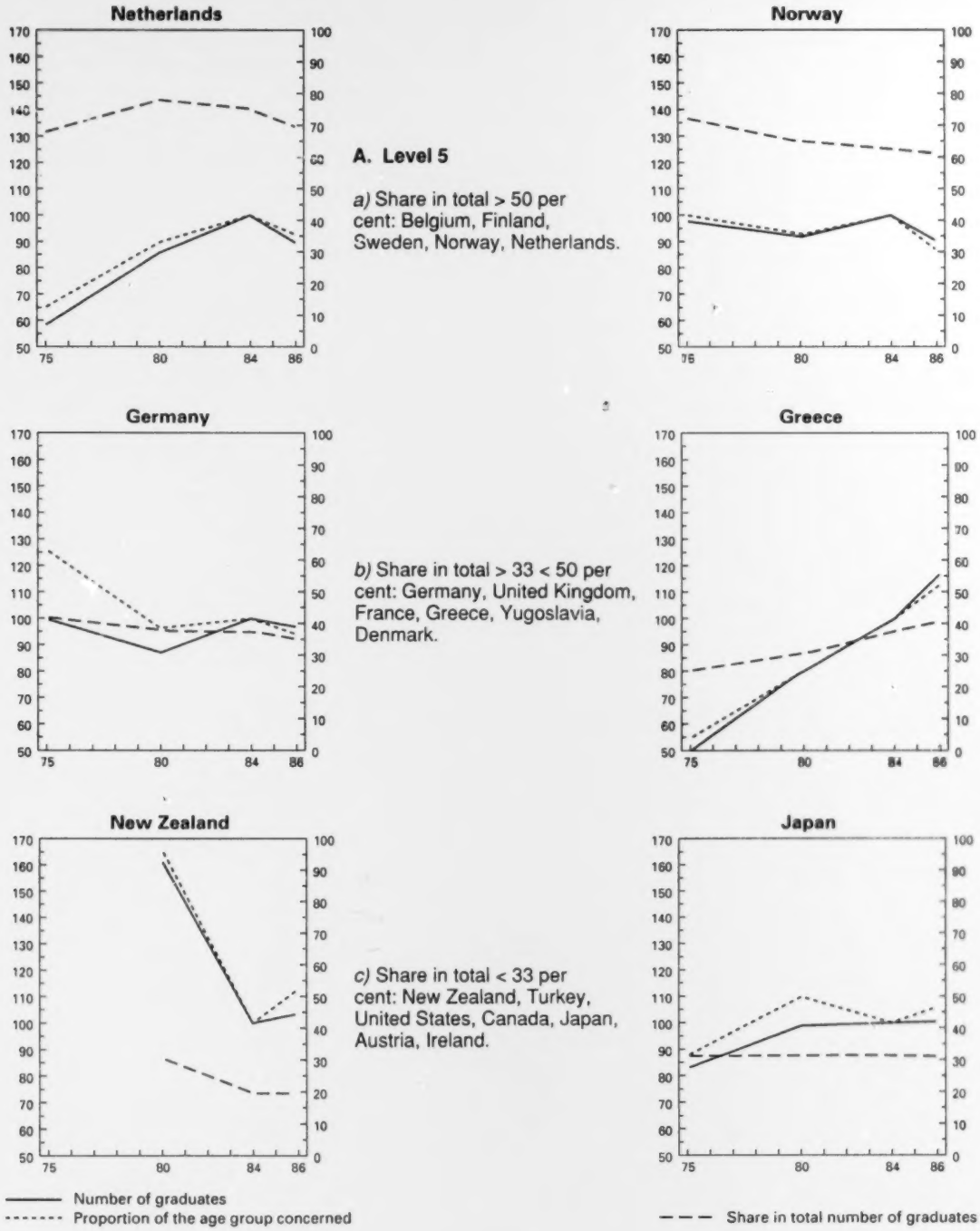
VIII.2. LEVEL 6 GRADUATES

In Japan, Austria, Ireland, Turkey, Italy and Spain some two-thirds or more of those qualifying in 1986 did so at level 6 and, apart from a few fluctuations at differing periods, their number has varied little since 1975 in Japan, Turkey and Spain, but has dropped in Italy. In the case of Austria and Ireland the data for 1986 are not comparable with those for previous years. The proportion of the reference age group obtaining a qualification increased at the same pace as their number in Japan (except between 1984 and 1986 when the proportion fell while the number rose slightly), but more slowly in Spain, where the differential is fairly substantial, and in Austria until 1984, after which both figures

Graph VIII

Third level graduates

(Left-hand axis: numbers graduating and proportion of the age group,
index 100 = 1984
right-hand axis: percentage of those qualifying at the different levels in the total number of graduates)



A. Level 5

a) Share in total > 50 per cent: Belgium, Finland, Sweden, Norway, Netherlands.

b) Share in total > 33 < 50 per cent: Germany, United Kingdom, France, Greece, Yugoslavia, Denmark.

c) Share in total < 33 per cent: New Zealand, Turkey, United States, Canada, Japan, Austria, Ireland.

declined; the proportion also increased in Turkey between 1984 and 1986. In Italy the proportion fell whereas the number of graduates rose slightly.

Level 6 graduates in 1986 represented between roughly 54 and 61 per cent of the total in Yugoslavia, the United States, Denmark (levels 6 and 7), Greece, New Zealand, Germany, Canada and Switzerland. Since 1975 this figure has increased in Germany and Yugoslavia, decreased in Greece and New Zealand, decreased in Canada up to 1984, in Denmark since 1980 and in Switzerland between 1984 and 1986. The trends since 1975 for both the number of graduates and their proportion of the reference age group have varied from period to period. In Canada there has been a steady increase in both figures (except between 1975 and 1980 with respect to the proportion), although this increase has been faster in the case of the number of graduates. In Germany a steady increase in the number went hand in hand with a decrease in the proportion between 1975 and 1980, which then increased between 1980 and 1984 – albeit less steeply than the number – and a levelling-off between 1984 and 1986. In the United States the number of graduates was the same in 1980 as in 1975, whereas their proportion of the reference age group first fell and then subsequently rose faster than the number until 1986. In Denmark both the number and the proportion declined at the same rate until 1984, after which the number increased very slightly while the proportion continued to decline. In Greece there was a fairly similar increase in both figures between 1975 and 1980, followed by a fall between 1980 and 1984, slightly less marked in the case of the proportion which then, between 1984 and 1986, continued to decline whereas the number of graduates rose slightly. In New Zealand there was an increase in the number of graduates from 1975 to 1984 (and in the proportion up to 1980) followed by a decline. From 1984 to 1986 both figures fell but the number more sharply than the proportion. In Yugoslavia both figures have followed a fairly similar trend: an increase between 1975 and 1980, and a decrease between 1980 and 1984 and again between 1984 and 1986. Lastly, in Switzerland the rise in the number of graduates between 1975 and 1986 was accompanied until 1984 by a slightly smaller rise and then by a subsequent fall in their proportion of the reference age group.

In the remaining countries for which these figures are available – Norway, the Netherlands (levels 6 and 7), Sweden, Finland, France, the United Kingdom and Belgium (levels 6 and 7) – the percentage of graduates in level 6 in 1986 ranged between 26 and 49 per cent of the total. Since 1975 this percentage fell sharply in Finland and slightly in the United Kingdom until 1986, in the Netherlands and Belgium until 1980, and rose thereafter. It increased in Norway throughout the entire period, up to 1984 in Sweden, and in France between 1984 and 1986. The number of graduates rose steadily in the Netherlands and the United Kingdom, and until 1984 in Belgium, Finland, Norway and Sweden – subsequently levelling off in the first of these countries and falling in the other three – and in France between 1984 and 1986. The proportion of the reference age group has followed a similar pattern but, in all countries, compared with the number of graduates, either the increase has been less sharp – particularly in the United Kingdom – or the decrease more marked. In Finland, both figures fell continuously between 1975 and 1986, although the fall in the number of graduates has been steeper.

VIII.3. LEVEL 7 GRADUATES

In Belgium, Denmark and the Netherlands level 7 graduates are counted in with those for level 6. In the remaining countries they accounted in 1986 for between 20 and 30 per cent of the total number of graduates only in the United States, New Zealand and Switzerland, a proportion which is declining slightly in the case of the first of these countries but increasing in the other two. In New Zealand and Switzerland both the number of graduates and their proportion of the reference age group have increased, the numbers more sharply than the proportion. In the United States the number of graduates has changed relatively little, but the proportion of the reference age group fell quite sharply until 1984 when it recovered slightly, although by 1986 it had not regained its 1975 level; nonetheless, its figure of 93 per thousand is far higher than that for other countries. In Canada, Norway, Italy, the United Kingdom and France the proportion of graduates at level 7 in 1986 was between 10 and 17 per cent of the total, showing no great change since 1975 in Canada and the United Kingdom, an increase throughout the entire period in Norway and up to 1984 in Italy, and a decrease in France from 1980 to 1986. In these five countries, except Italy and Norway, there was a rise in the number of graduates after 1984 but, on the other hand, while the proportion of the reference age group rose in Canada and the United Kingdom, as well as in Norway until 1984, the figure in 1986 was slightly below what it had been in 1980 in the case of France and Italy.

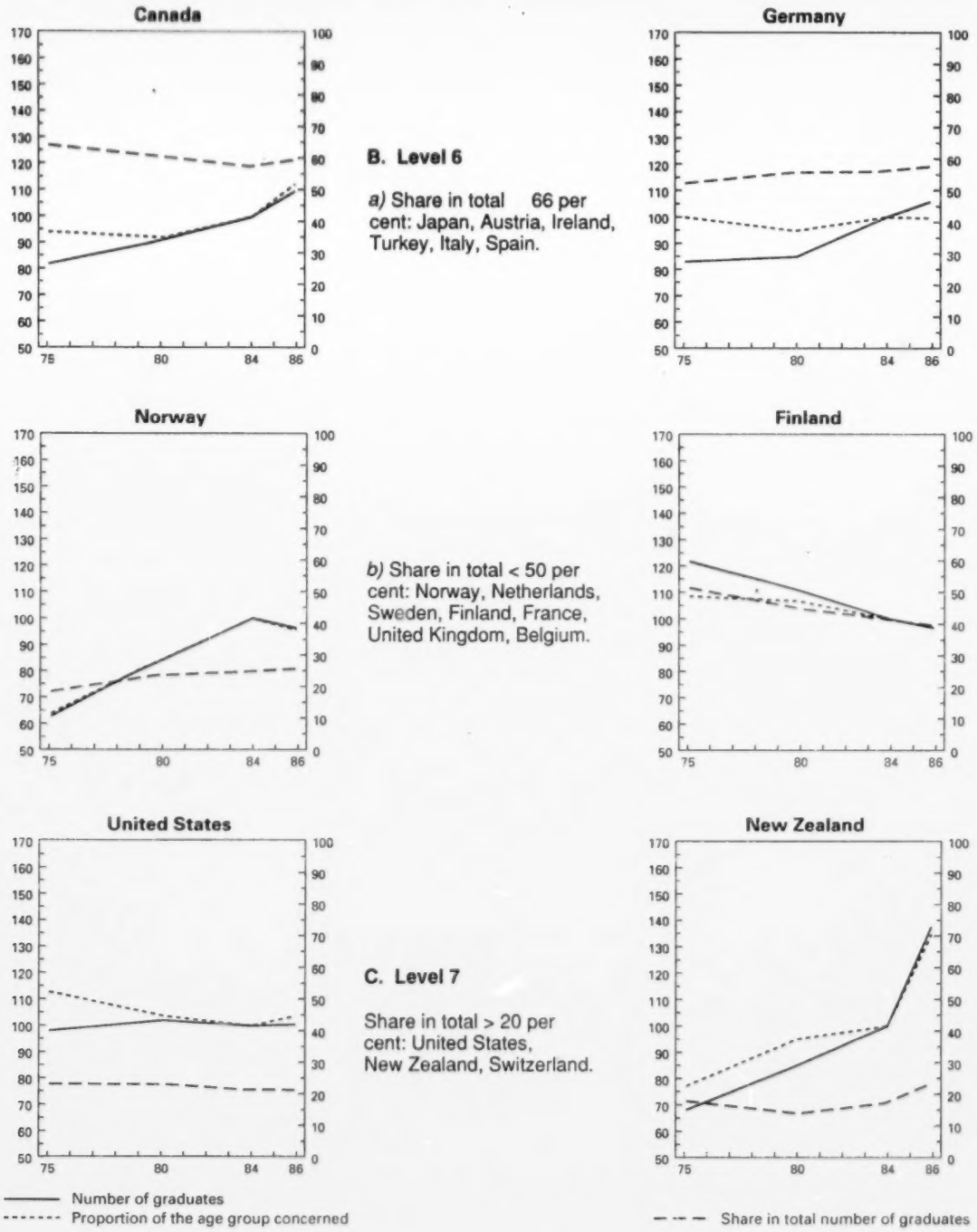
For the remaining countries both the percentage of graduates and the proportion of the reference age group are too small for any trend to be of any great significance.

In short, whatever the breakdown may be between graduates at the different levels of third level education, their number is generally increasing, in some cases fairly sharply. By contrast, for purely demographic reasons the proportion of an age group obtaining a qualification has either risen less sharply or dropped. As new and less numerous age groups reach the stage when they will be obtaining these qualifications, there is every likelihood that this proportion will increase, even if the number of qualifications awarded remains unchanged. The question then may well be whether the "output" of graduates will be sufficient to satisfy the needs of the economy for skilled and highly skilled personnel.

Graph VIII *(continued)*

Third level graduates

(Left-hand axis: numbers graduating and proportion of the age group, index 100 = 1984
right-hand axis: percentage of those qualifying at the different levels in the total number of graduates)



IX. TEACHERS

If the way a country classifies its pupils does not correspond with the ISCED's classifications, it is relatively easy to reclassify them if the figures are given by grade. For example, if compulsory education is treated as a whole – what is generally termed "basic education" – the first six grades can be considered as equivalent to the first level and subsequent grades as equivalent to the second level-first stage. Similarly, the children attending a particular school can be classified by the level of education they are enrolled in, simply on the basis of the existing data. In the case of teachers the situation is far more complex. For one thing, they are usually classified by type of school and not by the level of education at which they teach. Secondly, there are differences in the categories of staff that each country considers as "teachers", particularly in the case of school heads and other qualified staff who perform administrative duties. Thirdly, most countries provide information solely on the number of teachers, irrespective of whether they are full-time or part-time, and only in some cases differentiate between the two. On the other hand, some countries, particularly for the more recent years, provide only the full-time equivalent figure. Very few countries give both types of information although each has its own particular value, the reason being that one has to know how many people are employed in the "education" sector and how many, therefore, will need to be recruited and trained; the number will be relatively greater in a country with a high proportion of part-time teachers than in one where the vast majority of them are full-time. On the other hand, pupil/teacher ratios can be calculated only on the basis of full-time equivalents. Unfortunately, it is not possible to compare these two types of information either by country or by period.

Given these differences, the data on teachers cannot be compared with those on pupils in Chapter I, or by country. The following analysis will therefore be confined to showing the trend in the number of teachers in each level of education (mentioning those countries where this is the full-time equivalent figure), the proportion of women and the proportion of part-time teachers among teachers as a whole and among women teachers.

IX.1. PRE-PRIMARY EDUCATION

Only nine countries were able to provide figures on the number of pre-primary teachers for the four years in question: France, Greece, Italy, Japan, Luxembourg, Norway, Portugal, Spain and Yugoslavia. One country – Ireland – has supplied figures for the full-time equivalents. For five other countries – Austria, Belgium, Denmark, New Zealand (full-time equivalents) and Turkey – figures for only two years are available, 1984 and 1986 in most cases. The number of teachers has risen, particularly between 1975 and 1980, in all countries except Japan, where it has fallen slightly since 1980, and in Ireland and France where there has been a similar slight downward trend since 1984.

In 1986 (or the latest available year) almost all teachers at this level were women, although men represented 12 per cent of the total in Japan, 24 per cent in Ireland and 43 per cent in Denmark. This pattern has not changed significantly since 1975.

In the few countries for which such information exists, there are relatively few part-time teachers: 10 per cent or less, other than Norway with 40 per cent in 1984. Japan is the only country where relatively fewer women than men teach part-time.

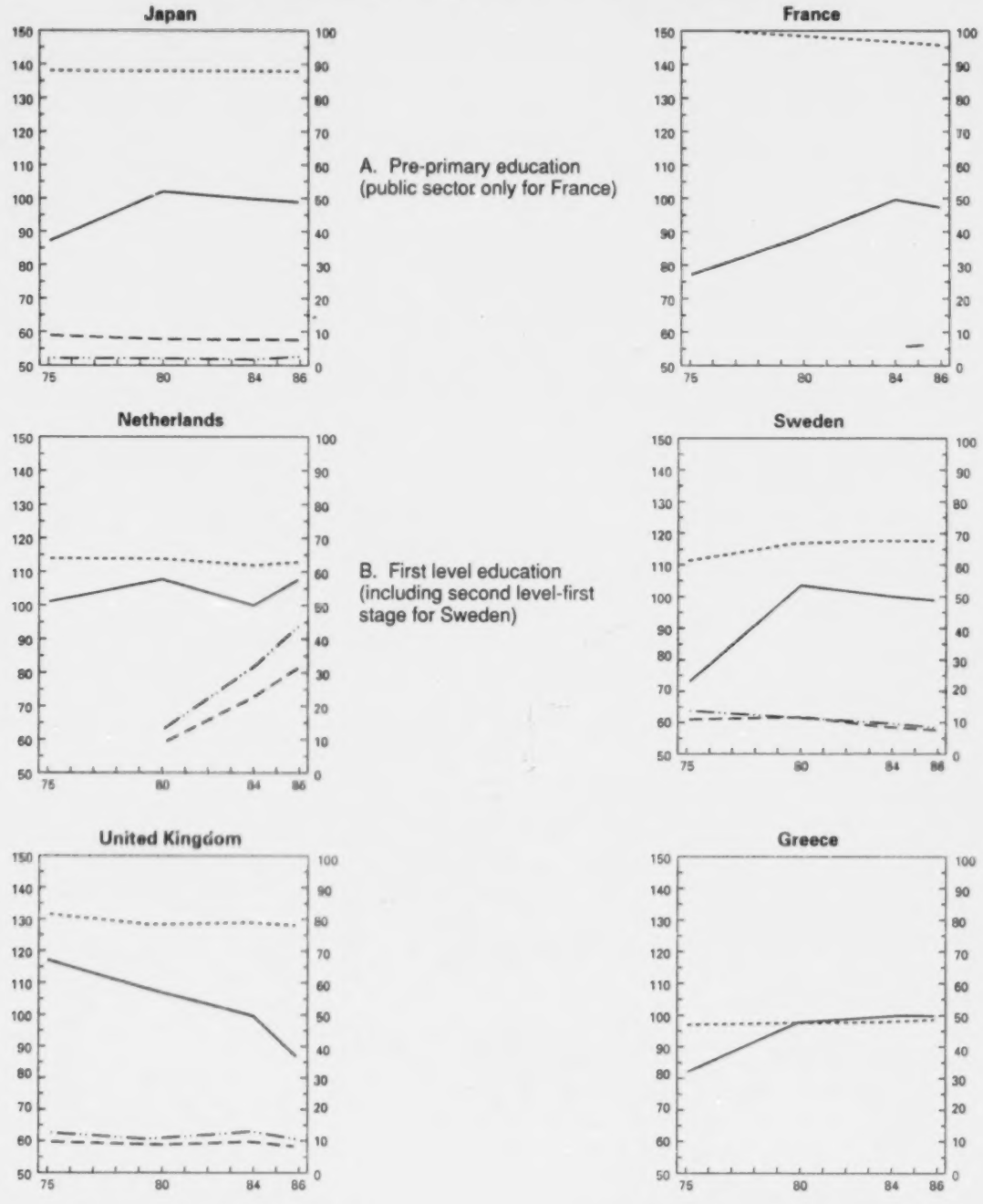
IX.2. FIRST LEVEL EDUCATION

The data for this level are more complete than for pre-primary education despite the fact that, in certain cases, they do not cover all of the reference years and sometimes include other levels – usually the pre-primary level or the first stage of the secondary level. Here too, the number of teachers or full-time equivalents showed an increase until 1984 and particularly between 1975 and 1980, the only exception being Finland. From 1984 to 1986 the figure continued to rise in half of the countries and levelled off or fell slightly in the other half, except in Germany and more particularly in the United Kingdom where there was a more pronounced drop.

Graph IX

Teachers

(Left-hand axis: number of teachers, index 100 = 1984
right-hand axis: percentage of women and part-time teachers)



In 1986 women accounted for more than 75 per cent of the teachers at this level in Ireland, the United Kingdom, Germany, Portugal, Austria and Italy (where the figure was as high as 90 per cent); between two-thirds and three-quarters in Sweden, Yugoslavia, France, Australia, New Zealand and Spain; and about 60 per cent in Japan, Denmark, Belgium, Norway and the Netherlands. There were an equal number of men and women teachers in Greece and Luxembourg and a majority of men in Turkey. In most countries the proportion of women has increased.

The proportion of part-time teachers, although generally higher than in pre-primary education, is still fairly low except in the Netherlands and Norway where, in 1986, it amounted to about a third of the total; in the Netherlands this proportion has more than tripled since 1980, while in Norway it rose by over 30 per cent between 1975 and 1984, and then subsequently fell. The proportion of part-time teachers in 7 of the 11 countries which supplied this information is higher for women than for teachers as a whole: in 1986 the figure for women was 44 per cent in the Netherlands and 50 per cent in Norway compared with 32 and 34 per cent respectively for teachers as a whole.

IX.3. SECOND LEVEL EDUCATION

Given the fact that only in extremely few cases are separate data available, on the one hand, for the first and second stages of secondary education and, on the other, for general education and vocational/technical education, all of the teachers at the secondary level have been grouped together.

Between 1975 and 1986 their numbers have risen in all countries, except for the period from 1984 to 1986 in the case of Sweden, Germany, Portugal, Belgium and the United Kingdom when they fell. This increase was particularly marked between 1975 and 1980.

Women teachers are far less numerous at this level than at the lower ones. In 1986 they outnumbered or equalled men in only 8 out of 18 countries, i.e. Italy (61 per cent), and Denmark, France, Austria, Greece, Yugoslavia, Belgium and the United Kingdom (50 per cent); in Canada they also outnumbered men but, since the figures cover the pre-primary, primary and secondary levels, they are not comparable with those for other countries. Women made up less than 30 per cent of secondary teachers in Luxembourg, Japan and the Netherlands (21 per cent). Their proportion has increased in all countries since 1975, although in some – Austria, Germany, Japan, Luxembourg, the United Kingdom and Greece – there was a slight downturn or levelling off between 1984 and 1986.

As for the proportion of part-time teachers, this is higher than in the first level – except in Norway where it has fallen sharply since 1975. It has also fallen in Sweden and Germany (from 1984 to 1986). It has remained stable in Japan and risen in Yugoslavia. Since the data for the other countries cover only one or two years, it is not possible to discern a meaningful trend.

Here again, there are relatively more women than men teaching part-time, the gap between the two being particularly wide in Norway and the Netherlands: respectively 42 and 68 per cent in 1986 for women as against 24 and 32 per cent for men and women combined.

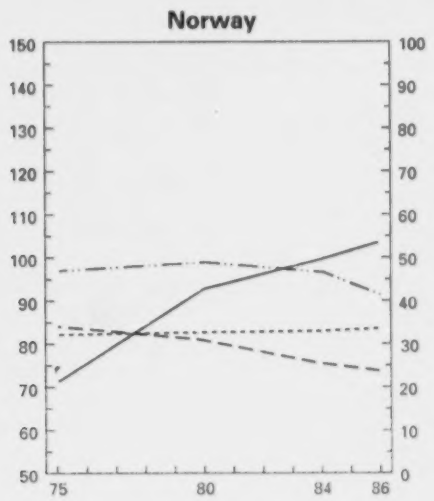
As a final comment to conclude this brief chapter, and bearing in mind what was said in the first paragraph, what is apparent at all levels is that there has been an increase in the number of teachers since 1975 with, however, a tendency for the rate to slow or, in some cases, even drop since 1984. What is also noticeable is the increase in the proportion of women (except at the pre-primary level where, in most cases, the teaching staff are still nearly all women), although there continued to be wide differences both between countries and between levels. This increase, at least in certain countries, is partly due to the relatively large number of women among the part-time teachers, who account for widely differing proportions of the teaching staff at the different levels and in the different countries.

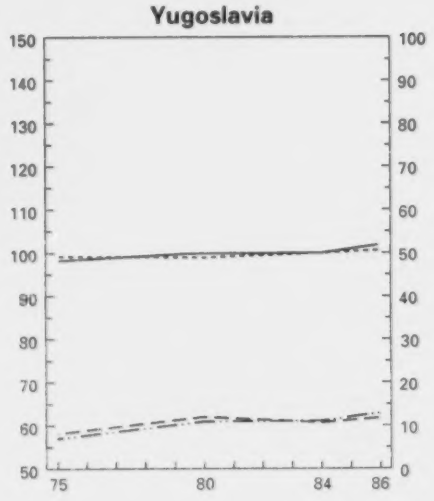
Graph IX *(continued)*

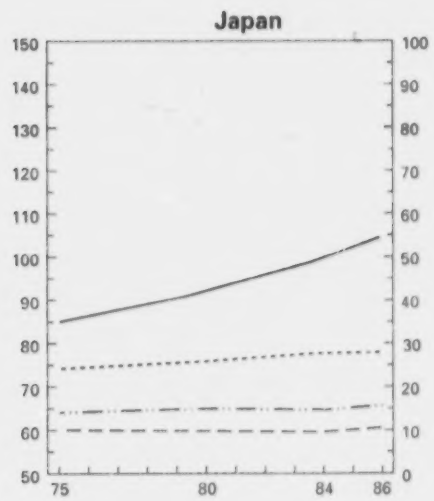
Teachers

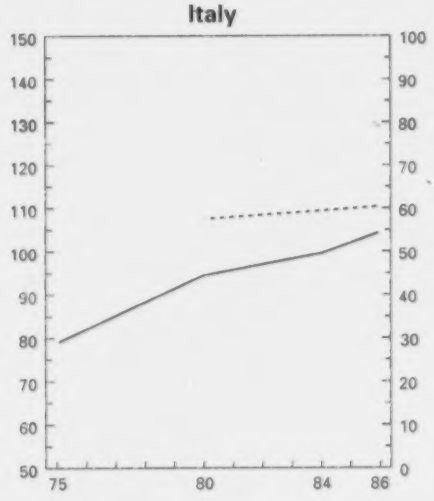
(Left-hand axis: number of teachers, index 100 = 1984
right-hand axis: percentage of women and part-time teachers)

C. Second level education (second stage only for Norway and Yugoslavia)









——— Total number of teachers (in full-time equivalent for the Netherlands)

– – – Percentage of part-time teachers

------ Percentage of women

—·—·— Percentage of women teaching part-time

X. EXPENDITURE ON EDUCATION

X.1. EXPENDITURE ON EDUCATION AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT

One of the indicators most often used to measure the effort being made by countries in the field of education is the percentage of their GDP they devote to it. This figure is influenced by several factors, particularly the country's demographic structure on which the economically active proportion of the population depends, the distribution of the school-age population between the different levels of education, the volume of public expenditure as a whole and the priority assigned to a particular item in the budget, the share of private non-subsidised education, etc. What is more, the same percentage figure will not have the same significance in the case of a "rich" country with a high per capita GDP as in the case of a "poor" country where this figure is much lower.

Relatively few countries are able to supply figures for private expenditure on education and, even when they do, it is not always possible to know whether or not these cover all of this expenditure. The share that this represents of GDP is generally very small: in 1986 it equalled or exceeded 1 per cent only in the United States, Japan and France. As a general rule, private expenditure is increasing.

The data concerning public expenditure on education are far more detailed and easier to compare. In 1986 its share of GDP ranged between 5 and 6.5 per cent in 9 out of 22 countries. It was very low in Greece (2.7 per cent) and Yugoslavia (3.5 per cent) and relatively low in Germany, New Zealand and Portugal, as well as in Japan and the United States where, as we have just seen, private expenditure is relatively high. By contrast, the figure exceeded 6.5 per cent in the Netherlands, Norway, Canada, Luxembourg, Denmark and Sweden. In most countries this share was lower than in 1975, the exceptions being Austria, Greece, France, Italy and Sweden, where the figure rose, and Luxembourg and Portugal where it has remained virtually unchanged. The downward trend has been regular in Germany, the Netherlands and Turkey, as well as in Switzerland despite a levelling off between 1980 and 1984. In Canada, Finland, Denmark and the United States there was a reversal of this trend between 1984 and 1986. In Japan, the downturn began in 1980. There has been a steady rise since 1975 in Greece and Italy, and since 1980 in Austria. In the remaining countries there have been alternate rises and falls from one period to another.

What has to be taken into account, however, is the fact that, as was noted in Chapter III, in most countries the proportion of school-age children within the population as a whole declined between 1975 and 1986. The only countries in which the trend for public expenditure on education and that for the number of pupils and students have differed are Austria, Finland, France, Italy and Luxembourg, where expenditure has risen while numbers have fallen, unlike Ireland, Japan and Norway where the reverse has occurred.

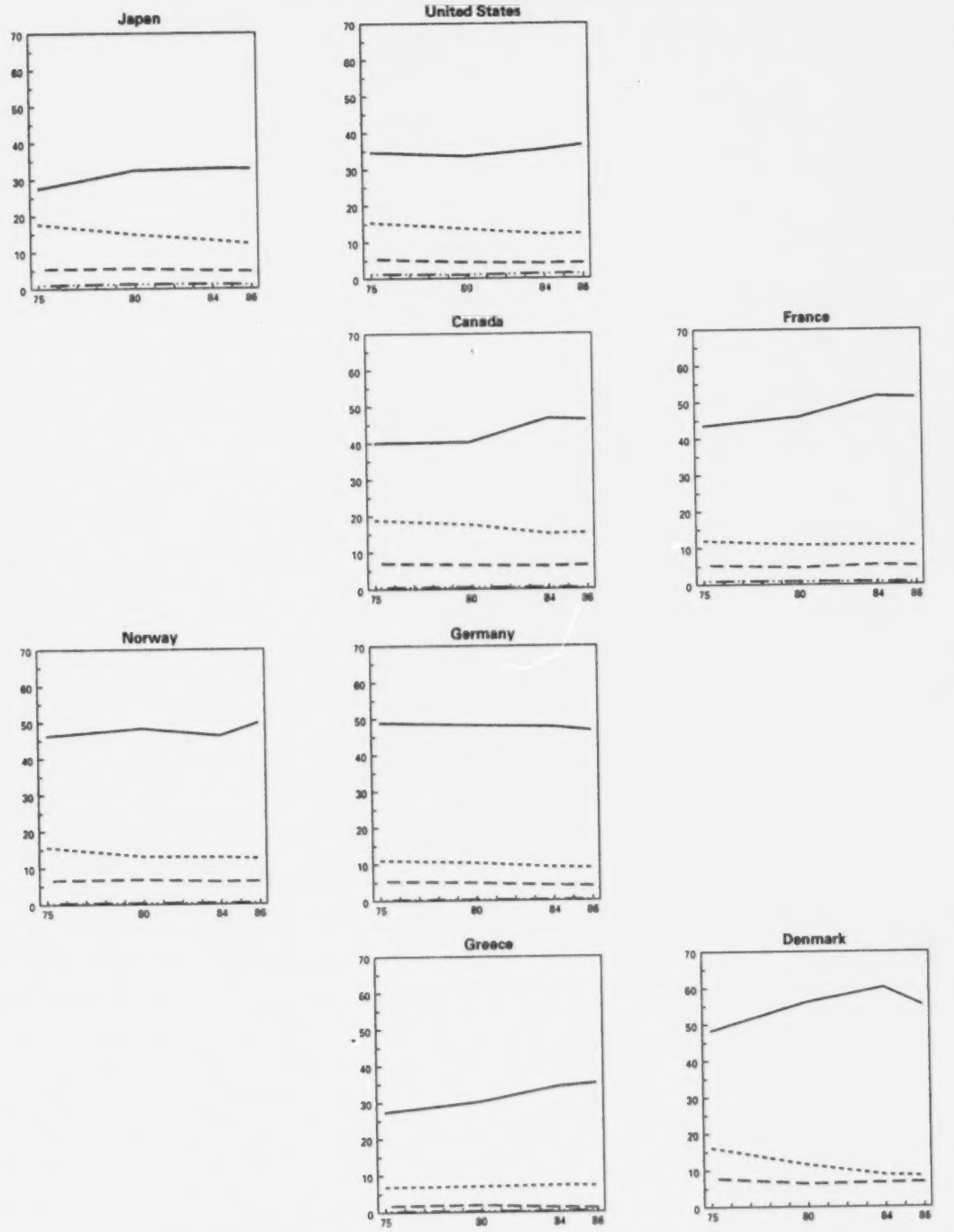
X.2. TOTAL PUBLIC EXPENDITURE AND PUBLIC EXPENDITURE ON EDUCATION

The proportion of GDP that countries devote to public expenditure as a whole also differs greatly. In 1986 the figure exceeded 50 per cent in 9 out of 21 countries and was over 60 per cent in Sweden. By contrast, the figure was below 40 per cent in Australia, the United States and Greece, as well as in Switzerland and Japan where it was in the region of 33 per cent. In every country, with the exception of Germany and the United Kingdom, the figure was above that for 1975. However, between 1984 and 1986 there was a fall in about half of the countries, generally fairly slight except in the case of the United Kingdom and more particularly Denmark.

Given the generally divergent trends for the percentage of GDP devoted, on the one hand, to public expenditure as a whole and, on the other, to public expenditure on education, it is not surprising to see that spending on education has declined as a proportion of total public expenditure. In every country this proportion was much lower in 1986 than in 1975, more particularly in Finland and Portugal where it fell by close to 40 per cent, and in Japan, the Netherlands and the United Kindom where it fell by about or just over 25 per cent. The downward trend was in all cases a steady one, except in Ireland, Portugal and the United States where there was a slight upturn between 1984 and 1986. It is noticeable that, as a general rule, those countries which devote the highest proportion of their public expenditure to education are the ones where such expenditure is lowest in relation to GDP.

Graph X. 1

Expenditure on education and total public expenditure



Total public expenditure as a percentage of GDP

Total expenditure on education as a percentage of total public expenditure

Public expenditure on education as a percentage of GDP

Private expenditure on education as a percentage of GDP

X.3. PUBLIC EXPENDITURE ON PUBLIC EDUCATION BY LEVEL OF EDUCATION

This sub-section deals solely with public expenditure on public education. For one thing, private expenditure by level of education, particularly on public education, is very poorly documented and, for another, public expenditure on private education is, in most cases, available only as an aggregate figure and the proportion of total expenditure that it represents varies to such an extent as to make any comparison impossible. What has to be borne in mind, however, is the fact that, in some countries, the education of pre-school age children is not considered as education in the strict sense and is not the responsibility of the education authorities. In other countries a varying proportion of certain types of education is entirely funded by non-public sources and this, of course, affects the breakdown of public expenditure on the different levels of education. This breakdown also depends on the breakdown of the school population and the priority assigned to a particular type or level of education.

Expenditure is usually related not to programmes of education but to educational establishments which may provide programmes at different levels, e.g. pre-primary and first level; first level and second level-first stage, particularly in countries where these compose basic education; general education and vocational/technical education; and different stages at the third level. Accordingly, to compare the trend for expenditure with that for the number of pupils/students (see Chapters I and II above), which is shown not only by level of education but also for the public and private sectors combined, could be misleading. However, for the sake of convenience, the separation into the different levels of education has been retained and mention is made of those countries where the data cover more than one level. Expenditure on other types of education than those corresponding to the different ISCED levels, and expenditure not distributed by level, which varies considerably from period to period and from country to country, have been omitted.

a) Pre-primary education

In most of the countries where a separate figure is available for expenditure on pre-primary education, its share of total expenditure in 1986 was either very small (from 1 to 3 per cent) or small (around 6 per cent). However, it amounted to or exceeded 10 per cent in Ireland and France, and was rising eveywhere except in Japan and the Netherlands (at least until 1984 when this expenditure was combined with that for the first level), and except in Australia and in Ireland between 1984 and 1986.

b) First level education

In Belgium, Luxembourg, the Netherlands (for 1986 only) and Portugal (except for 1986), the expenditure figures relate to pre-primary and first level; to pre-primary and the first eight grades in the United States; to the first level and second level-first stage in Denmark, Norway, Sweden, Turkey and Yugoslavia; to the first and second levels in Australia and Switzerland; and to the pre-primary and the first and second levels in Canada. It should also be mentioned that in Austria and Germany first level education lasts only four years. For those countries where the expenditure relates only to first level education and where this is of comparable length, this expenditure represented a relatively small proportion of the total in France and the Netherlands (up to 1984), but a relatively high proportion in Japan and New Zealand.

In every country, expenditure in 1986, irrespective of what this covered in each case, represented a smaller proportion of the total than in 1975, except in Ireland, Turkey and Yugoslavia where the figure rose, and in the United States where it has remained virtually the same.

c) Second level education

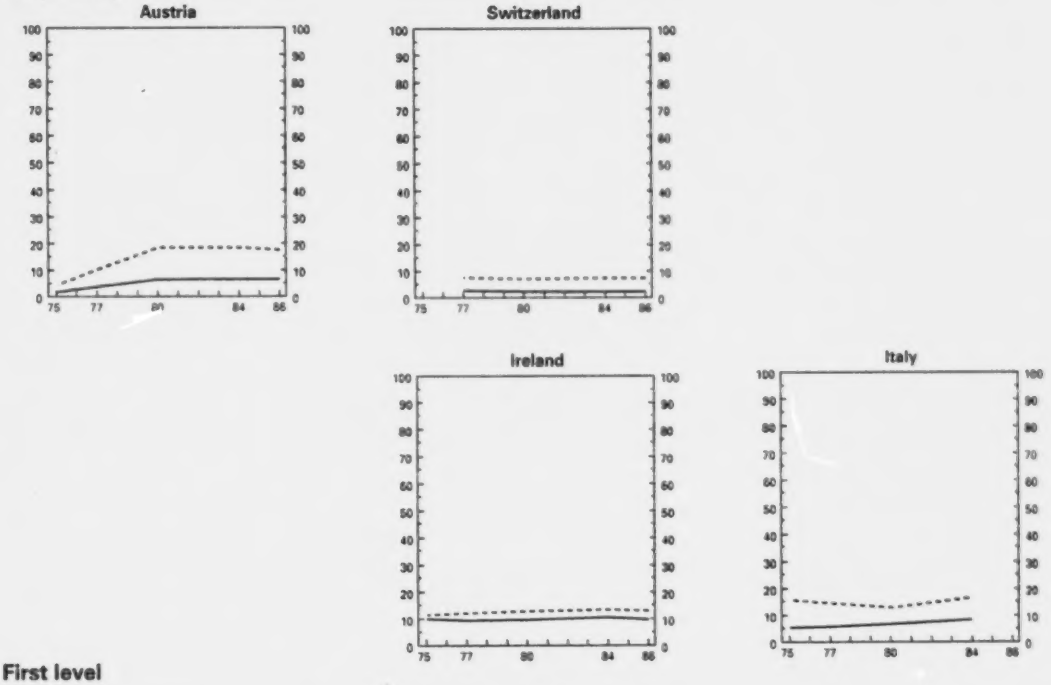
Expenditure relates only to the second level-second stage in Denmark, Norway, Sweden, Turkey and Yugoslavia, and to the 9th to 12th grades in the United States. In Finland it covers some level 5 programmes in third level education. In Germany and Austria, due to the short duration of first level education, it covers more grades than in other countries.

In those countries which have figures relating solely to the second level and where the duration of this is substantially the same, the proportion of expenditure allocated to it is relatively low in Luxembourg and the Netherlands, and high in Belgium and the United Kingdom. Taking the countries as a whole, the trend has been more sharply contrasted than in the case of first level education. Between 1975 and 1986 this proportion has risen steadily in France, Greece, New Zealand (very sharply), Norway and the United Kingdom, and up to 1984 in Belgium, Finland and Germany. It declined until 1984 in Turkey and from 1980 onwards in Austria, Canada, Ireland and the United States. In the remaining countries the trend has been very irregular, with alternate rises and falls from one period to another.

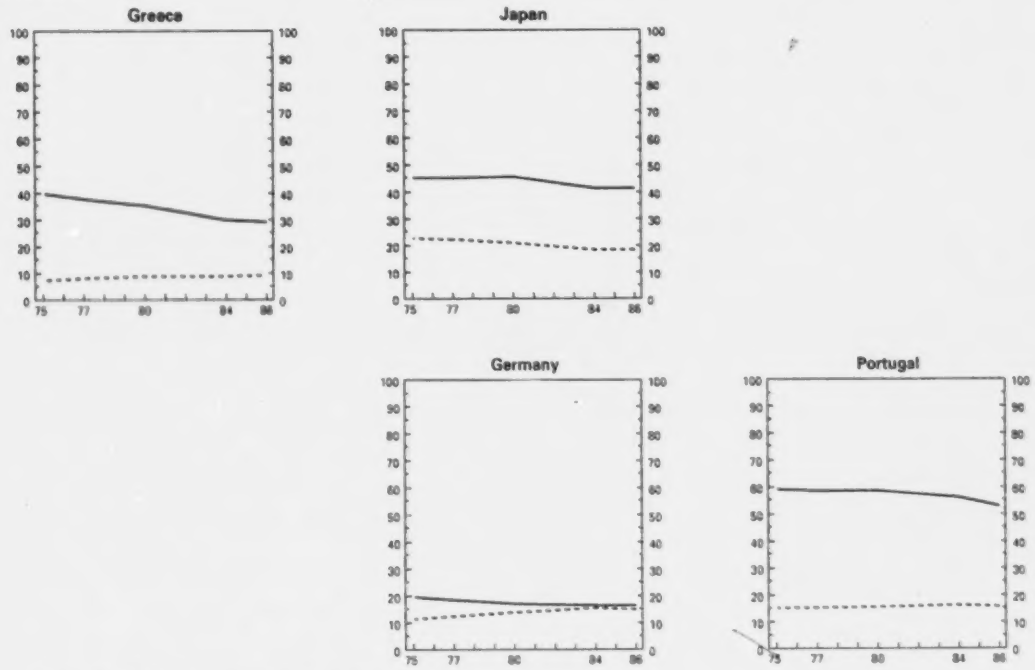
Graph X. 2

Public expenditure on public education, by level and per pupil/student

A. Pre-primary



B. First level



——— Share of total public expenditure on education

- - - - - - - Public expenditure per pupil/student as a percentage of per-capita GDP

61

d) Third level education

Expenditure on third level education, unlike that allocated to other levels where coverage varies from country to country, relates solely to this level, except in Finland's case where some of the level 5 programmes are included as part of secondary education. The differences between countries are substantial. In 1986 the proportion of expenditure allocated to the third level amounted to 25 per cent or more in Germany, Turkey, the Netherlands, Canada and Australia, while the figure was less than 15 per cent in Portugal and Japan – although, in Japan's case, a major part of third level education is in the private sector; the proportion was only slightly higher than this in France, Sweden and Norway. Between 1975 and 1986 it increased steadily in Australia, Japan, Portugal and Switzerland, and remained relatively stable in the United States. In the remaining countries it has risen and fallen alternately. In 1986 it was below its 1975 level in nine out of 22 countries.

X.4. EXPENDITURE PER PUPIL/STUDENT AS A PERCENTAGE OF PER CAPITA GROSS DOMESTIC PRODUCT

Expenditure per pupil/student is a more meaningful way of comparing the priority accorded by countries to a particular level of education than is the breakdown of expenditure between these levels, which is influenced to a very large extent by the way the school population is distributed between these levels. This expenditure has been related to per capita GDP in order to take into account each country's level of economic development and "wealth". The accompanying charts provide a comparison for a number of different countries between expenditure per pupil/student and the proportion of total public expenditure allocated to each level of education.

Although the figures for public expenditure by level of education are known, the same cannot be said as regards the numbers of pupils/students concerned which, in many cases, have to be reworked in order that they tally with the breakdown for expenditure. Given that some countries were unable to supply this information, the Secretariat has, as far as possible, itself reworked the figures. The expenditure figure is the amount spent per pupil/student in public education, but it is possible that the figure for a pupil/student in the private sector is different.

The variations in the precise coverage of the expenditure for each level of education, that were mentioned in the preceding sub-section, also apply here.

a) Pre-primary education

Expenditure per pre-primary pupil is very low both in Sweden, where the education authorities are not responsible for pre-primary schooling, and in Switzerland. In the remaining countries it exceeded 10 per cent of per capita GDP in 1986 and was particularly high in Austria and the United Kingdom. In both the United Kingdom and Greece the figure was slightly above that for a first level pupil. Despite some irregularity in the trends, except in the case of Greece where expenditure rose in each period, the figure was generally higher in 1986 than in 1975.

Comparing the trend for the proportion of public expenditure allocated to this level of education with that for expenditure per pupil, the countries divide into three main groups: those where the two trends have been roughly parallel (Switzerland, France and Ireland); those where they have diverged – with that for expenditure per pupil being either more favourable (Austria, the Netherlands) or unfavourable (Italy, Japan) until 1980 when the situation reversed; and those where expenditure per pupil has risen more rapidly (Greece and the United Kingdom).

b) First level education

In those countries where the data cover solely first level education, expenditure per pupil is very low in Greece and relatively low in Ireland, France and Germany, but high in Austria and Finland. In the majority of countries, and irrespective of whatever other non-primary pupils may be included in this figure, expenditure in 1986 was higher than in 1975, the exceptions being Finland, Japan, Switzerland and Luxembourg; there was however a slight downturn in France between 1984 and 1986, the only years for which the data are available. The increase was a steady one in Austria, Greece and Sweden and, up to 1984, in Canada, Ireland, Italy and Portugal. In the remaining countries there have been alternate rises and falls.

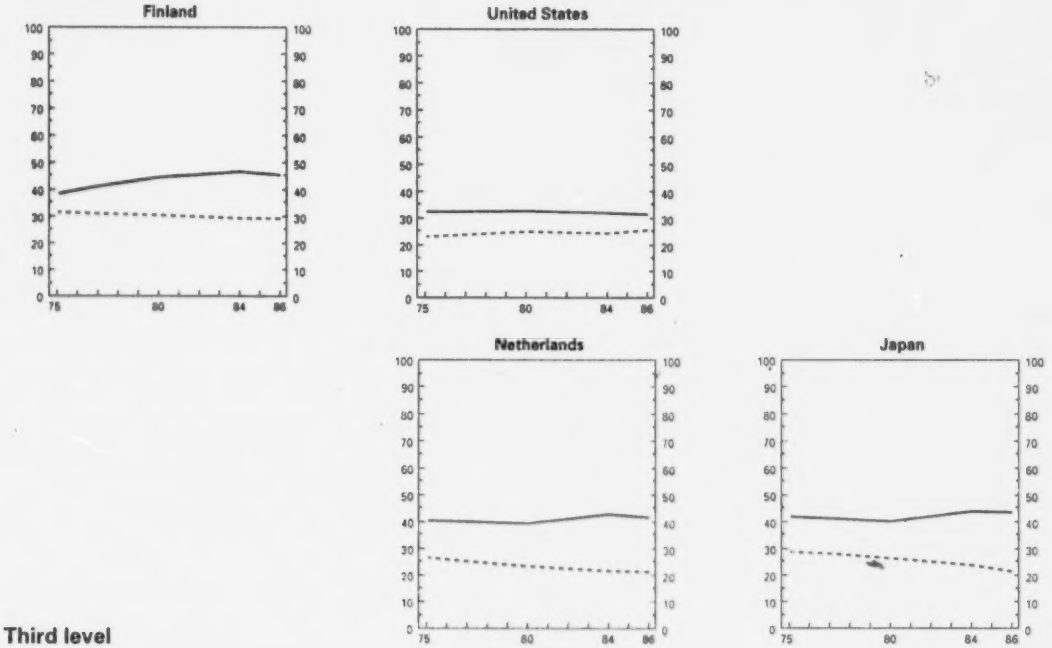
Generally speaking, expenditure per pupil has either increased more or decreased less than the proportion of total expenditure, except in Japan and Switzerland between 1975 and 1980, and in the Netherlands, Sweden, Finland and Denmark between 1984 and 1986.

Graph X. 2 *(continued)*

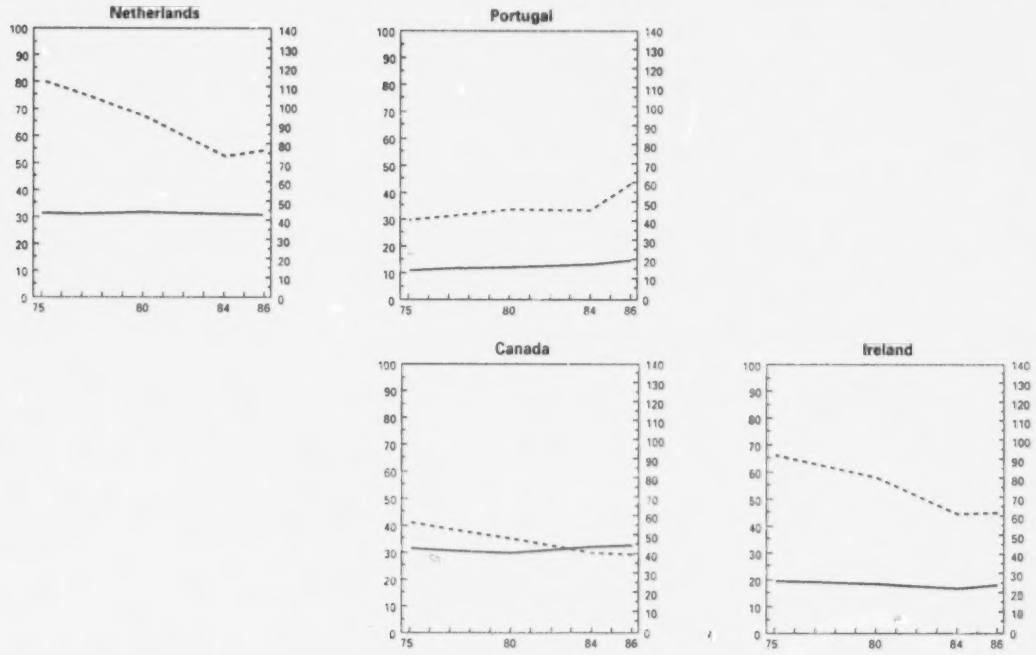
Public expenditure on public education, by level and per pupil/student

(Left-hand axis: share of public expenditure,
right-hand axis: public expenditure per pupil/student as a percentage of per-capita GDP)

C. Second level



D. Third level



——— Share of total public expenditure on education

------- Public expenditure per pupil/student as a percentage of per-capita GDP

c) Second level education

In those countries where the data cover the second level as a whole, expenditure per pupil in 1986 amounted to less than 20 per cent of per capita GDP in Greece, Germany and Portugal, and was around 33 per cent in Austria and Luxembourg. In contrast to expenditure per first level pupil, the figure for the second level was lower than that for 1975 except in Austria, Germany, Greece, Italy (1984), Luxembourg, Sweden and the United States. The fall was a steady one in Japan, the Netherlands and Portugal, as was the rise in Austria, Germany and Greece. In the remaining countries the trend has fluctuated from period to period.
Since 1975 the trend for total expenditure on second level education has been more favourable than that for expenditure per pupil, except in Austria, Italy, Sweden and the United States and, since 1984, in the United Kingdom, Norway, Denmark and Luxembourg.

d) Third level education

Expenditure per student enrolled in any of the levels of higher education is generally well above the expenditure per second level pupil. However, in 1986 the figure was relatively very low in the United States and France – less than 30 per cent of per capita GDP – compared with over 75 per cent in the Netherlands and the United Kingdom and 100 per cent in Japan. In virtually all countries the 1986 figure was lower than that for 1975 or 1980, particularly in those countries (Finland, Ireland, Japan, the Netherlands, Norway and Switzerland) where it had been very high at the beginning of the period. The figure has risen only in Portugal and Sweden, and in the Netherlands, Norway and the United States between 1984 and 1986.

As a general rule, despite a few exceptions in one period or another, the proportion of public expenditure allocated to the third level has either increased more or decreased less than expenditure per student.

To sum up, the drop in the numbers enrolled in pre-primary and primary education has, apart from one or two exceptions, led to an increase in the figure for expenditure per pupil, whereas the rise in numbers in the second and third levels has meant a drop in the figure for expenditure per student.

ANNEX TO PART A

I. PUPILS

I.1. PRE-PRIMARY EDUCATION

	Change in population aged 3 to 5 years (1984=100)				Change in enrolments (1984=100)				
	1975	1980	1984	1986	1975	1980	1984	1986	
OST	121	100	2 688	103	90	97	171 881	111	OST
BEL	114	97	3 659	98	111	97	395 232	96	BEL
CAN	100	97	10 900	100	96	96	413 734	104	CAN
DEN	128	118	1 700	92	76	107	59 013	95	DEN
FIN	95	102	1 910	103	58	78	40 148	108	FIN
FRA	110	94	23 196	99	103	94	2 525 624	101	FRA
GER	126	99	17 920	102	105	97	1 580 280	107	GER
GRE	97	97	4 333	95	67	90	162 155	96	GRE
IRE	99	102	2 004	104	92	93	147 497	99	IRE
ITA	137	124	19 020	96	111	113	1 648 833	99	ITA
JPN	125	116	47 400	96	107	113	2 132 942	95	JPN
LUX	103	95	128	101	113	99	7 684	109	LUX
NET	127	100	5 356	98	130	103	399 453	88	NET
NZL	124	102	1 524	98	91	94	60 476	101	NZL
NOR	126	105	1 540	99	35	83	94 443	110	NOR
POR	116	113	4 463	97	36	68	117 859	109	POR
SPA	116	117	16 856	89	80	103	1 145 968	95	*SPA*
SWE	116	105	2 880	98	71	93	251 865	106	SWE
SWI	110	98	2 194	101	106	100	120 727	106	SWI
TUR	90	104	36 890	100	6	6	82 598	126	TUR
UKM	117	..	21 656	100	85	..	671 000	101	*UKM*
USA	96	90	106 425	102	89	87	3 530 783	112	USA
YUG	96	101	11 080	98	52	81	360 987	107	YUG

	Participation rates (percentage)			
	1975	1980	1984	1986
OST	48	62	64	69
BEL	100	100	100	100
CAN	37	37	38	40
DEN	21	31	35	36
FIN	13	16	21	22
FRA	100	100	100	100
GER	73	87	88	93
GRE	26	35	37	38
IRE	69	68	74	69
ITA	70	79	87	89
JPN	39	44	45	44
LUX	66	62	60	65
NET	76	77	75	67
NZL	29	36	40	41
NOR	17	49	61	68
POR	8	16	26	29
SPA	47	60	68	72
SWE	53	77	87	95
SWI	53	56	55	57
TUR	..	..	2	3
UKM	22	..	31	31
USA	31	32	33	36
YUG	18	26	33	36

I.2. FIRST LEVEL EDUCATION AND SECOND LEVEL-FIRST STAGE

	Change in population aged 6 to 15 years (1984=100)				Change in population aged 6 to 11 years (1984=100)				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	97	100	25 897	98	100	107	14 816	97	AUS
OST	130	118	9 700	95	143	121	5 293	98	OST
BEL	119	109	12 885	97	123	110	7 326	99	BEL
CAN	119	105	36 409	99	113	103	21 307	101	CAN
DEN	113	109	6 963	97	118	108	4 044	94	DEN
FIN	118	104	6 273	100	114	96	3 792	103	FIN
FRA	106	104	80 393	98	111	109	45 780	98	FRA
GER	149	127	66 840	92	170	126	35 050	99	GER
GRE	103	103	14 354	99	108	103	8 385	100	GRE
IRE	94	99	6 934	101	95	100	4 175	99	IRE
ITA	109	107	83 880	94	116	110	47 730	91	ITA
JPN	88	99	191 400	97	93	105	113 100	92	JPN
LUX	120	114	428	97	126	113	241	103	LUX
NET	119	113	20 532	94	132	121	11 033	97	NET
NZL	110	104	5 741	96	113	111	3 248	95	NZL
NOR	107	108	6 010	95	118	114	3 370	94	NOR
POR	107	103	17 028	98	109	102	10 113	96	POR
SPA	98	100	65 112	98	99	101	38 838	96	SPA
SWE	107	108	10 630	98	115	108	6 170	96	SWE
SWI	121[a]	113	8 010	96	126[a]	114	4 464	98	SWI
TUR	94	99	114 690	113	96	100	69 830	115	TUR
UKM	121	115	75 069	96	133	121	41 110	100	UKM
USA	113	103	341 915	100	111	105	196 825	104	USA
YUG	100	99	36 628	101	98	97	22 271	101	YUG

	Change in population aged 12 to 15 years (1984=100)			
	1975	1980	1984	1986
AUS	93	91	11 081	100
OST	115	114	4 407	91
BEL	114	106	5 559	95
CAN	126	107	15 102	96
DEN	105	112	2 919	100
FIN	125	117	2 481	96
FRA	99	97	34 613	99
GER	126	129	31 790	85
GRE	95	104	5 969	96
IRE	92	98	2 759	103
ITA	99	102	36 150	98
JPN	82	89	78 300	104
LUX	112	114	187	90
NET	103	103	9 499	89
NZL	105	96	2 493	96
NOR	93	101	2 640	96
POR	104	104	6 915	100
SPA	96	98	26 274	100
SWE	97	108	4 460	101
SWI	115[a]	113	3 546	93
TUR	91	98	44 860	109
UKM	107	108	33 959	92
USA	116	102	145 090	94
YUG	104	102	14 357	102

a) 1977.

I.3. SECOND LEVEL-SECOND STAGE FULL-TIME EDUCATION

	Change in population aged 16 to 19 years (1984=100)				Change in enrolments (1984=100)				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	96	103	10 195	104	80	..	529 680	110	*AUS*
OST	89	102	5 076	95	83	96	279 015	98	OST
CAN	115	118	16 033	96	120	108	1 131 669	103	CAN
DEN	90	97	3 272	91	65	90	222 403	102	DEN
FIN	109	105	2 913	93	83	99	226 563	96	FIN
FRA	99	100	34 260	99	86	95	1 977 616	105	FRA
GER	88	102	41 150	91	79	97	3 224 958	96	GER
GRE	91	93	6 183	95	64	79	362 532	105	GRE
IRE	88	101	2 573	101	69	83	121 738	107	IRE
ITA	86	96	38 060	98	82	95	2 550 147	104	ITA
JPN	91	93	69 500	108	89	94	4 921 914	107	JPN
LUX	101	106	214	94	86	89	13 182	99	LUX
NET	96	103	9 812	101	62	80	494 271	105	NET
NZL	101	106	2 389	101	84	99	110 330	104	NZL
NOR	93	94	2 660	101	76	86	190 595	98	NOR
SPA	89	95	26 604	99	61	86	2 151 642	107	*SPA*
SWE	89	94	4 830	95	71	87	302 637	93	SWE
SWI	93[a]	101	4 028	95	77[a]	94	103 271	97	SWI
TUR	82	88	43 530	100	70	90	984 919	116	TUR
UKM	89	99	37 097	96	93	103	2 581 000	99	*UKM*
USA	114	113	149 790	99	111	111	6 342 149	98	USA
YUG	104	101	14 596	98	89	105	983 614	96	YUG

	Participation rates (percentage)			
	1975	1980	1984	1986
AUS	43	..	52	55
OST	51	52	55	57
CAN	74	64	71	76
DEN	49	63	68	76
FIN	59	73	78	80
FRA	50	55	58	62
GER	70	74	78	83
GRE	42	50	59	65
IRE	37	39	47	50
ITA	64	66	67	71
JPN	69	72	71	70
LUX	52	52	62	65
NET	32	39	50	53
NZL	39	43	46	48
NOR	59	65	72	70
SPA	55	73	81	88
SWE	50	58	63	62
SWI	21[a]	24	26	26
TUR	19	23	23	26
UKM	73	72	70	71
USA	41	41	42	42
YUG	58	70	67	66

a) 1977.

I.4. DIFFERENT TYPES OF SECOND LEVEL-SECOND STAGE EDUCATION

(Proportion of each type in total enrolments)

	General education				Vocational/technical education				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	79	82					
OST	26	24	24	22	31	34	37	39	OST
BEL	..	..	48	49	..	..	40	41	BEL
DEN	40	37	35	31	60	63	65	69	DEN
FIN	49	49	49	48	51	51	51	52	FIN
FRA	37	37	38	39	54	52	53	52	FRA
GER	19	21	21	20	81	79	79	79	GER
GRE	..	73	73	70	..	27	27	30	GRE
IRE	..	..	72	74	..	..	14	16	IRE
ITA	27	25	24	24	73	75	76	76	ITA
JPN	59	66	69	70	36	31	28	27	JPN
LUX	27	27	26	25	52	49	55	55	LUX
NET	39	33	30	28	23	24	33	35	NET
NZL	..	..	69	69	..	..	2	2	NZL
NOR	53	47	43	42	41	47	53	53	NOR
SPA	58	59	55	55	42	41	45	45	*SPA*
SWE	29	29	23	22	71	71	77	78	SWE
SWI	20[a]	21	21	20	6[a]	8	11	11	SWI
TUR	56	60	58	58	44	40	42	42	TUR
UKM	64	..	55	53	6	..	10	10	*UKM*
YUG	35	43	41	37	65	57	59	63	YUG

	Part-time education			
	1975	1980	1984	1986
AUS	..	..	21	18
OST	43	42	39	38
BEL	..	..	12	10
FRA	9	11	10	9
GER	1	0	0	1
IRE	..	..	13	10
JPN	5	3	3	3
LUX	21	24	19	21
NET	37	43	37	37
NZL	..	..	29	29
NOR	6	6	4	5
SWI	70[a]	67	68	68
UKM	30	..	35	36

a) 1977.
b) Including part-time education.

II. STUDENTS

II.1. Third level education

(full-time and part-time)

	Change in population aged 20 to 24 years (1984 = 100)				Change in enrolments (1984 = 100)				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	86	95	13 469	99	77	90	358 498	–	*AUS*
OST	78	88	6 562	100	56	76	165 313	109	OST
BEL	95	100	7 969	98	65	77	245 762	103	BEL
CAN	90	99	23 450	95	67	77	1 152 398	102	CAN
DEN	95	95	3 918	106	104	93	114 559	104	DEN
FIN	110	101	3 799	99	83	94	121 002	111	FIN
FRA	99	98	42 886	100	83	82	1 249 064	103	FRA
GER	80	91	52 530	103	69	81	1 519 050	104	GER
GRE	89	97	7 224	101	70	72	167 957	118	GRE
IRE	..	94	2 904	99	49	62	// 67 378	109	IRE
ITA	84	90	46 130	105	83	95	1 181 953	97	ITA
JPN	113	98	80 300	101	94	100	2 343 780	103	JPN
NET	90	95	12 679	100	74	93	390 244	102	NET
NZL	88	92	2 988	94	75	80	95 754	107	NZL
NOR	97	98	3 140	104	71	84	94 089	111	NOR
SPA	84	95	31 892	103	63	79	857 036	115	*SPA*
SWE	99	97	5 690	107	88	95	184 665	99	SWE
SWI	89[a]	92	5 115	103	71[a]	80	105 897	111	SWI
TUR	78	86	47 190	104	..	57	417 225	120	TUR
UKM	82	89	46 929	102	73	83	1 006 969	106	*UKM*
USA	91	102	213 745	95	82	93	12 464 661	98	USA
YUG	107	101	18 633	99	110	114	360 397	97	YUG

	Participation rates (percentage)			
	1975	1980	1984	1986
AUS	24	25	27	..
OST	18	22	25	27
BEL	21	24	31	32
CAN	37	38	49	53
DEN	32	29	29	28
FIN	24	30	32	36
FRA	24	24	29	30
GER	25	26	29	29
GRE	18	17	23	27
IRE	..	..	23	26
ITA	25	27	26	24
JPN	24	30	29	30
NET	26	30	31	31
NZL	27	28	32	36
NOR	22	26	30	32
SPA	20	22	27	30
SWE	29	32	32	30
SWI	17[a]	18	21	22
TUR	..	6	9	10
UKM	19	20	21	22
USA	52	53	58	60
YUG	20	22	19	19

a/ 1977.

II.2. DIFFERENT LEVELS OF THIRD LEVEL EDUCATION

(Percentage distribution of students between the various levels)

	Level 5				Level 6*				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	26	..	..	..	67	..	*AUS*
OST	12	7	8	7	88	91	89	90	OST
BEL	48	51	51	45	52	49	49	55	BEL*
CAN	20	21	24	22	72	70	68	70	CAN
DEN	22	22	25	22	78	78	75	78	DEN*
FIN	23	25	27	29	72	70	68	65	FIN
FRA	12	15	16	17	74	71	70	70	FRA
GER	20	16	14	13	80	84	86	87	GER*
GRE	19	29	34	41	81	71	66	59	GRE*
IRE	30	28	// 32	33	65	63	// 60	62	IRE
ITA	2	3	3	3	94	92	92	93	ITA
JPN	18	18	18	18	80	80	79	79	JPN
NET	58	58	56	55	42	42	44	45	NET*
NZL	45	44	45	47	49	48	48	47	NZL
NOR	36	44	46	49	64	56	54	51	NOR*
SPA	..	0	0	0	..	100	97	..	*SPA*
SWE	25	..	53	52	67	..	40	42	SWE
SWI	..	29	33	..	..	61	57	..	*SWI*
TUR	..	8	11	11	..	92	84	84	TUR
UKM	41	..	35	35	47	..	54	53	*UKM*
USA	33	36	38	37	53	50	49	50	USA
YUG	31	25	20	16	69	75	80	84	YUG*

	Level 7			
	1975	1980	1984	1986
AUS	..	..	7	..
OST	..	2	3	4
CAN	9	9	8	8
FIN	5	5	6	6
FRA	14	14	14	13
IRE	5	9	// 7	// 5
ITA	3	6	6	4
JPN	2	2	3	3
NZL	6	7	7	7
SPA	..	..	3	..
SWE	8	7	7	6
SWI	..	10	10	..
TUR	..	..	5	5
UKM	12	12	11	12
USA	14	14	13	13

a) In the countries followed by an asterisk, levels 6 and 7 are counted together.

II.3. PART-TIME STUDENTS

(Percentage in each level)

	Level 5				Level 6				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	55	..	..	..	39	..	*AUS*
BEL	..	..	22	23	-	-	-	-	BEL
CAN	1	1	18	15	28	34	36	37	CAN
GER	1	6	8	10	-	-	-	-	GER
IRE	..	..	..	..	..	..	..	..	IRE
JPN	14	12	10	10	13	11	13	14	JPN
NET	34	38	32	28	..	3	5	7	NET
NZL	..	..	76	75	..	..	36	36	NZL
NOR	13	12	23	32	8	12	14	17	NOR
SWI	..	30	44	..	-	-	-	-	SWI
UKM	..	..	74	74	..	..	20	21	*UKM*
USA	56	62	61	63	22	22	23	24	USA
YUG	63	54	42	47	28	30	23	24	YUG

	Level 7			
	1975	1980	1984	1986
AUS	..	..	65	..
CAN	40	42	38	39
NZL	..	..	48	39
UKM	..	..	43	44
USA	55	55	54	54

III. SCHOOL-AGE POPULATION AND ACTUAL ENROLMENTS

	Population aged 3 to 24 years (as a percentage of total population)				Actual enrolments (as a percentage of total population)				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	39.3	38.3	36.3	35.3	..	..	22.7	..	*AUS*
OST	33.9	33.4	31.8	30.9	23.0	22.0	20.6	20.3	OST
BEL	34.0	32.4	30.9	30.0	23.9	22.8	24.3	23.6	BEL
CAN	41.2	37.8	34.7	33.4	28.1	24.9	24.4	24.2	CAN
DEN	33.0	32.2	31.0	30.2	21.3	21.5	21.0	20.6	DEN
FIN	35.2	32.2	30.5	29.9	21.4	20.3	19.7	19.7	FIN
FRA	35.4	33.8	32.9	32.3	25.9	25.5	25.0	24.9	FRA
GER	32.4	31.3	29.2	28.1	23.9	23.3	21.5	20.7	GER
GRE	34.3	33.0	32.4	31.5	16.3	19.8	20.5	20.7	GRE
IRE	..	41.8	40.8	41.1	26.9	26.8	// 28.2	28.4	IRE
ITA	33.8	33.5	32.8	31.9	22.5	22.3	21.2	20.4	ITA
JPN	34.2	33.2	32.4	31.9	21.7	22.7	22.4	22.0	JPN
LUX	..	30.9	29.2	28.4	..	18.2	16.7	16.4	LUX
NET	38.0	35.9	33.5	32.3	27.9	27.5	25.9	25.1	NET
NZL	42.4	40.7	38.5	37.3	28.1	27.5	27.4	27.3	NZL
NOR	34.6	33.6	32.2	31.6	21.0	22.7	22.8	22.4	NOR
POR	42.7	40.6	36.6	35.7	..	16.9	16.9	16.8	POR
SPA	37.6	37.6	36.6	35.6	23.4	25.3	26.1	26.3	*SPA*
SWE	30.1	29.6	28.8	28.5	19.4	20.7	20.5	20.1	SWE
SWI	32.5[a]	31.6	30.0	29.2	21.8[a]	21.4	20.1	19.5	SWI
TUR	53.0	51.6	49.6	50.2	16.9	18.2	20.0	20.2	TUR
UKM	33.5	32.9	32.0	31.3	23.5	..	22.1	21.7	*UKM*
USA	39.6	36.7	34.3	33.2	27.9	25.6	24.4	23.7	USA
YUG	..	36.3	35.2	34.6	..	20.6	19.9	19.6	YUG

	Participation rates of population aged 3 to 24 years				Share of part-time enrolments				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	–	62.6	..	..	..	8.5	..	*AUS*
OST	66.5	64.8	64.8	65.6	10.0	11.7	11.5	11.2	OST
BEL	70.4	70.6	78.7	78.5	..	..	5.7	3.9	BEL
CAN	68.2	66.0	70.3	72.4	2.9	4.1	6.1	6.3	CAN
DEN	64.5	66.8	67.7	68.2	–	–	–	–	DEN
FIN	60.9	63.2	64.5	65.8	–	–	–	–	FIN
FRA	73.1	75.4	75.9	77.0	1.2	1.6	1.5	1.5	FRA
GER	73.7	74.3	73.7	73.7	0.1	0.1	0.2	0.4	GER
GRE	47.7	60.1	63.2	65.6	–	–	–	–	GRE
IRE	..	64.1	69.1	69.2	1.5	1.4	// 3.4	3.2	IRE
ITA	66.5	66.6	64.6	63.8	–	–	–	–	ITA
JPN	63.6	68.6	69.3	69.0	2.2	1.5	1.6	1.7	JPN
LUX	57.2	58.8	57.3	57.7	4.7	5.5	4.9	5.6	LUX
NET	73.4	76.6	77.3	77.7	4.8	7.6	10.1	10.9	NET
NZL	66.1	67.5	71.3	73.2	4.2	4.1	// 10.9	11.7	NZL
NOR	60.6	67.7	70.6	70.8	1.8	2.1	2.6	3.8	NOR
POR	43.3	41.8	46.2	47.1	–	–	–	–	POR
SPA	62.1	67.3	71.4	73.9	–	–	–	–	*SPA*
SWE	64.3	69.9	71.2	70.4	–	–	–	–	SWE
SWI	67.2[a]	67.7	66.9	66.7	13.9[a]	15.4	18.1	18.7	SWI
TUR	35.7	35.3	40.3	40.2	–	–	–	–	TUR
UKM	70.2	..	69.1	69.5	9.5	..	14.3	15.5	*UKM*
USA	70.4	69.6	71.1	71.4	6.4	8.2	9.0	9.0	USA
YUG	53.1	56.7	56.4	56.6	3.5	3.2	2.1	2.1	YUG

a) 1977.

IV. ENROLMENT RATES (%)

17 year-olds

	Total				Part-time				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	..	49.8	..	..	..	10.4	*AUS*
OST	80.3	82.8	..	..	..	..	43.8	..	OST
BEL	..	..	81.7	86.4	..	..	5.3	4.7	*BEL*
CAN	..	..	75.9	78.5					
DEN	44.6	75.5	..	75.4	..	..	6.3	..	DEN
FIN	65.5	76.8	..	90.6					
FRA	..	..	75.3	79.7	..	..	10.1	10.3	*FRA*
GER	90.7	98.4	96.4	100.0	..	..	0.1	0.5	GER
GRE	58.2	41.5	..	55.2					
IRE	..	..	63.3	64.7					
ITA	44.5	47.1	44.4	46.3					
JPN	83.9	92.6	..	90.5	3.4	2.1	1.5	1.6	JPN
LUX	..	..	62.3	..	..	..	15.1	..	*LUX*
NET	72.4	80.1	..	86.8	12.0	11.5	11.3	10.4	NET
NZL	38.4	41.3	..	54.4	..	..	..	1.3	NZL
NOR	65.1	72.4	75.7	76.2	1.3	1.9	1.4	2.0	NOR
POR	35.5	..	39.2	..					
SPA	..	..	48.8	53.1					
SWE	55.4	..	..	86.0					
SWI	77.9	86.0	82.8	83.4	52.4	56.6	55.0	56.3	SWI
TUR	..	..	..	31.5					
UKM	..	..	46.3	49.4	..	..	15.2	16.2	*UKM*
USA	..	..	87.7	89.0					
YUG	55.1	71.6	..	66.3					

19 year-olds

	Total				Second level				
	1975	1980	1984	1986	1975	1980	1984	1986	
					..	..	..	9.8	*AUS*
OST	21.0	24.0	23.0	..	13.5	14.6	..	..	OST
BEL	..	..	50.8	53.5	..	..	20.6	22.9	*BEL*
CAN	..	..	37.7	40.7	..	..	8.7	8.7	*CAN*
DEN	39.7	51.1	..	52.5	34.9	47.4	..	48.4	DEN
FIN	27.4	33.1	..	28.9	22.1	26.5	..	21.4	FIN
FRA	..	..	34.9	43.0	..	..	9.9	6.5	*FRA*
GER	34.3	50.1	53.0	57.3	25.3	42.2	46.0	51.0	GER
GRE	36.0	..	28.7	30.9	19.9	4.7	..	8.9	GRE
IRE	..	..	23.6	24.1	..	..	4.0	..	*IRE*
					14.5	12.1	10.2	11.2	ITA
LUX	..	..	35.7	..	..	..	28.6	..	*LUX*
NET	31.4	42.1	49.9	53.7	21.7	27.5	35.7	38.4	NET
NZL	16.8	16.1	..	20.2	1.2	0.9	2.4	..	NZL
NOR	32.1	37.7	32.6	30.1	28.8	31.3	..	30.1	NOR
POR	25.0	..	30.3	..	18.4	..	24.6	..	POR
					..	..	14.0	15.0	*SPA*
SWE	14.0	..	..	42.9	8.7	..	..	31.4	SWE
SWI	..	..	53.9	54.9	43.6	48.0	49.7	50.6	SWI
					..	..	..	8.5	TUR
UKM	..	..	..	49.1..	..	..	9.1	10.8	*UKM*
USA	..	..	45.5	49.4	..	..	4.4	4.5	*USA*
YUG	42.5	55.3	..	69.0	27.4	39.6	..	55.7	YUG

IV. *(cont'd)*

21 year-olds									
	Total				Second level				
	1975	1980	1984	1986	1975	1980	1984	1986	
					..	..	..	0.7	*AUS*
OST	12.5	16.0	..	..	4.9	3.8	2.5	..	OST
BEL	..	..	29.4	30.7	..	..	..	7.5	*BEL*
CAN	..	..	23.0	25.3					
DEN	21.7	24.1	26.1	28.4	8.3	10.5	12.5	15.0	DEN
FIN	20.2	25.8	..	32.1	8.0	10.3	..	13.6	FIN
FRA	..	..	18.0	19.4	..	..	0.3	0.2	*FRA*
GER	16.6	24.0	24.6	25.7	3.6	8.5	10.4	12.1	GER
GRE	20.6	14.5	..	16.2	5.9	1.4	..	1.1	GRE
IRE	..	..	9.9	10.8	..	..	0.3	..	*IRE*
					3.2	1.6	1.5	1.4	ITA
LUX	..	..	0.2	..	..	..	0.2	..	*LUX*
NET	14.2	26.5	..	30.7	6.6	9.9	11.7	13.7	NET
NZL	11.2	12.3	..	16.2	0.6	0.9	0.9	..	NZL
NOR	25.1	38.5	24.2	24.0	16.2	23.9	9.2	7.9	NOR
POR	..	..	9.6	..	7.2	1.8	1.4	..	POR
					..	..	7.7	8.1	*SPA*
SWE	11.1	..	..	11.0	4.0	..	..	..	SWE
SWI	..	..	20.2	20.3	6.6	7.7	9.2	9.0	SWI
					..	..	..	2.4	TUR
					..	..	..	14.0	UKM
USA	..	..	30.9	29.8	..	..	0.6	0.8	*USA*
YUG	15.8	16.1	..	18.2	1.4	1.3	..	3.4	YUG

V. FEMALE PARTICIPATION (%)

V.1. SECOND LEVEL-SECOND STAGE EDUCATION

	Total				General education				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	42	43	..	..	50	50	*AUS*
OST	42	43	45	45	48	48	48	47	OST
BEL	..	..	50	50	48	50	51	51	BEL
CAN	49	49	49	49	49	49	49	49	CAN
DEN	39	47	48	48	52	57	59	58	DEN
FIN	53	54	56	56	59	61	61	60	FIN
FRA	49	50	50	50	59	61	58	58	FRA
GER	44	45	46	46	46	49	50	50	GER
GRE	..	46	49	47	..	54	55	55	GRE
IRE	57	57	50	51	53	55	53	53	IRE
ITA	44	48	50	50	47	51	54	55	ITA
JPN	49	49	49	49	52	51	51	51	JPN
LUX	35	41	44	46	47	53	55	57	LUX
NET	41	47	49	48	45	49	51	52	NET
NZL	55	51	48	48	54	50	50	50	NZL
NOR	47	50	51	50	52	56	56	55	NOR
SPA	46	49	51	52	48	53	54	54	*SPA*
SWE	50	52	53	51	60	64	67	64	SWE
SWI	41	43	43	44	49	50	51	51	SWI
TUR	31	34	37	37	33	37	43	43	TUR
UKM	..	..	50	51	49	49	49	49	*UKM*
USA	51	50	50	50	51	50	50	50	USA
YUG	46	46	47	47	51	48	48	48	YUG

	Vocational/technical education				Part-time education				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	–	–	–	–	..	..	10	11	*AUS*
OST	53	54	57	53	30	33	33	34	OST
BEL	49	50	48	47	..	..	55	58	BEL
CAN	–	–	–	–	–	–	–	–	CAN
DEN	31	41	42	44	..	..	..	..	DEN
FIN	47	47	51	52	–	–	–	–	FIN
FRA	47	48	48	47	22	24	26	28	FRA
GER	43	43	45	45	14	17	41	36	GER
GRE	..	25	30	29	–	–	–	–	GRE
IRE	83	70	64	64	..	..	22	22	IRE
ITA	43	48	48	48	–	–	–	–	ITA
JPN	45	45	45	46	45	38	32	32	JPN
LUX	41	43	44	45	20	30	30	38	LUX
NET	41	44	46	46	35	47	50	48	NET
NZL	93	82	81	79	..	..	41	39	NZL
NOR	44	47	48	49	24	24	31	34	NOR
SPA	43	43	48	49	–	–	–	–	*SPA*
SWE	46	47	47	47	–	–	–	–	SWE
SWI	67	63	67	66	34	36	37	39	SWI
TUR	29	29	28	28	–	–	–	–	TUR
UKM	54	57	55	54	..	..	51	54	*UKM*
USA	–	–	–	–	–	–	–	–	USA
YUG	43	45	46	46	–	–	–	–	YUG

V.2. THIRD LEVEL EDUCATION

	Total				Level 5				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	41	45	47	..	..	..	54	..	*AUS*
OST	38	42	44	44	70	75	68	69	OST
BEL	41	44	45	47	50	51	52	57	BEL
CAN	46	50	52	53	52	52	52	54	CAN
DEN	46	49	49	50	73	76	72	70	DEN
FIN	44	45	48	50	39	40	42	47	FIN
FRA	41	47	50	51	45	53	50	47	FRA
GER	38	41	42	41	57	65	66	64	GER
GRE	37	41	48	49	35	39	50	50	GRE
IRE	..	44	56	57	..	37	42	43	IRE
ITA	39	43	45	47	50	55	56	56	ITA
JPN	33	34	35	36	80	84	85	85	JPN
NET	33	40	42	44	38	46	46	46	NET
NZL	37	40	43	46	35	39	40	44	NZL
NOR	38	48	50	51	44	56	52	51	NOR
POR	75	60	65	72	93	88	92	92	POR
SPA	..	..	48	51	..	..	89	77	*SPA*
SWE	..	51	51	50	..	..	60	59	SWE
SWI	..	30	32	..	..	26	26	..	*SWI*
TUR	..	26	31	33	..	24	30	33	TUR
UKM	..	..	45	46	..	..	48	51	*UKM*
USA	45	51	52	52	46	54	55	56	USA
YUG	40	45	45	47	39	44	44	47	YUG

	Level 6*				Level 7				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	45	..	..	..	32	..	*AUS*
OST	34	40	42	43	-	19	27	29	OST
BEL*	33	36	38	39					
CAN	46	51	53	54	29	37	41	43	CAN
DEN*	38	41	42	44					
FIN	48	48	51	52	20	36	38	41	FIN
FRA	46	49	52	54	33	37	41	39	FRA
GER*	34	37	38	38					
GRE*	37	42	48	49					
IRE	..	46	47	48	..	48	50	40	IRE
ITA	39	43	46	47	..	..	32	33	ITA
JPN	23	23	24	25	9	12	13	14	JPN
NET	25	31	36	38					
NZL	41	43	49	51	28	32	39	43	NZL
NOR*	34	41	48	51					
SPA	..	..	48	50	..	..	34	..	*SPA*
SWE	..	..	46	46	..	25	29	30	SWE
SWI	..	34	36	..	..	22	27	..	*SWI*
TUR*	..	26	32	34					
UKM	..	..	45	45	..	..	34	35	*UKM*
USA	46	50	51	51	40	45	47	48	USA
YUG*	40	46	46	47					

a/ In the countnes followed by as astensk, levels 6 and 7 are counted together.

VI. PRIVATE EDUCATION

(as a percentage of total enrolments)

	Pre-primary education				First level education and second level-first stage education				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS					..	..	24	26	*AUS*
OST	33	28	27	26	4	4	5	5	OST
BEL	57	58	58	58	52	53	54	55	*BEL*
CAN	2	3	3	4	2	3	4	4	CAN
DEN	7	8	8	8	..	10	11	12	DEN
FIN	15	..	..	..	4	..	..	1	FIN
FRA	14	13	13	13	15	16	17	17	FRA
					3	..	5	5	GER
GRE	15	9	5	5	11	6	5	5	GRE
IRE	4	2	1	1	3	2	1	1	IRE
ITA	65	38	33	32	6	6	6	6	ITA
JPN	75	73	75	76	1	1	1	1	JPN
LUX	0	1	0	0	4	3	4	5	LUX
NET	72	70	69	..	74	73	87	86	NET
NZL	0.0	0.2	0.2	0.4	10	10	3	3	NZL
NOR	63	41	37	36	1	1	1	1	NOR
SPA	62	45	39	37	40	37	35	35	*SPA*
					0	1	1	1	SWE
SWI	4	3	4	3	3	3	3	3	SWI
TUR	..	..	5	6	1	1	1	1	TUR
UKM	5	..	5	5	5	5	5	6	*UKM*
USA	12	13	19	19	10	11	12	12	USA

	Second level-second stage general education				Second level-second stage vocational/technical education				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	30	31					
OST	11	9	10	11	38	29	29	22	OST
BEL[b]	..	..	58	66	..	..	67	60	*BEL*
CAN	6	7	8	6					
DEN	..	8	9	9	..	97	132	96	DEN
FIN	22	..	..	4	18	..	..	13	FIN
FRA	27	25	25	24	21	21	22	22	FRA
GER	10	..	10	10	4	4	4	4	GER
GRE	..	5	4	4	46	16	8	9	GRE
IRE	0	0	0	0	16	10	5	4	IRE
ITA	12	16	16	15	9	8	7	6	ITA
JPN	33	29	29	29	26	25	25	25	JPN
LUX	8	5	5	5	14	12	11	12	LUX
NET	71	71	71	71	87	86	87	87	NET
NZL	17	15	5	6	0	0	0	0	NZL
NOR	13	10	8	8	9	7	7	6	NOR
SPA	46	34	32	30	52	37	33	28	*SPA*
SWE	4	2	2	3	1	1	1	1	SWE
SWI	12	12	11	12	39	33	24	24	SWI
TUR	5	3	3	3	0	0	0	0	TUR
UKM	9	9	9	10					
USA	9	9	10	10					

a) First level only.
b) First and second stages.

VI. *(cont'd)*

	Third level private education			
	1975	1980	1984	1986
OST[c]	..	..	..	3
BEL	63	65	57	65
DEN	..	26	25	26
GER[c]	..	..	..	6
GRE	4	2	..	0.4
IRE	..	..	..	3
ITA	..	..	..	10
JPN	79	78	76	76
NET	57	59	58	53
NOR	7	8	17	23
POR	11	13	13	16
SPA	..	..	..	9
SWE	..	..	..	1
USA	22	22	22	23

c) No private universities. Students enrolled in non-university private institutions have been counted as a proportion of total third level students.

VII. SECOND LEVEL-SECOND STAGE GRADUATES AND NEW ENTRANTS INTO THIRD LEVEL EDUCATION

VII.1. CHANGE IN THE NUMBER OF GRADUATES AND OF NEW ENTRANTS

	Second level-second stage graduates (1984=100)				New entrants into third level education (1984=100)				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	110 462	116	..	..	98 978	..	*AUS*
OST	..	..	26 551	115	..	79	27 063	102	OST
					..	..	..	106	*BEL*
CAN	..	..	335 855	..					
DEN[a]	..	80	55 164	100	88	86	29 339	105	DEN
FIN[a]	80	93	87 992	94	81	89	26 045	116	FIN
FRA	..	..	256 486	106	96	..	262 279	105	FRA
					87	95	281 036	101	GER
GRE	75	82	69 192	107	54	57	59 851	84	GRE
IRE	64	80	45 773	105	60	86	17 929	107	IRE
ITA[a]	77	88	488 629	101	96	96	256 459	97	ITA
JPN	90	94	1482 312	109	101	99	617 244	109	JPN
NET[a]	75	88	123 337	112	..	67	95 047	89	NET
NZL	..	..	24 237	86	76	79	18 658	118	NZL
					..	95	11 381	106	NOR
POR	..	..	33 278	..	..	67	25 203	109	POR
SPA	..	..	219 957	103	..	81	185 835	108	*SPA*
SWE	..	..	98 181	92	..	89	80 908	107	SWE
					..	..	34 707	..	*SWI*
TUR[a]	..	..	..	111	93	..	122 992	103	TUR
UKM	0	0	342 389	97	..	..	296 500	102	*UKM*
USA	113	110	2 767 000	96	97	102	24 444 000	94	USA
YUG[a]	71	88	258 671	101	83	..	107 023	94	YUG

	Proportion of new entrants to level 5 (percentage)			
	1975	1980	1984	1986
AUS	..	..	36	..
OST	..	18	21	18
DEN	..	35	37	32
FIN	47	52	51	57
FRA	..	..	39	39
GER	45	37	35	36
GRE	29	45	49	45
IRE	..	44	..	..
ITA	3	4	4	4
JPN	30	31	31	33
NET	..	64	61	53
NZL	..	..	38	..
POR	..	..	12	..
SPA	..	1	0	0
SWE	..	..	69	72
SWI	..	..	62	..
TUR	..	..	18	18
UKM	..	..	..	47
USA	52	55	53	51
YUG	30	30	28	22

a) Including diplomas not giving access to third level.

VII.2. NUMBERS OF THOSE QUALIFYING AT THE END OF SECOND LEVEL AND OF THOSE ENTERING THIRD LEVEL AS A PROPORTION OF THE AGE GROUP (°/°°)

	Second level-second stage graduates				New entrants into third level				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	437	476	..	..	392	..	*AUS*
OST	..	..	217	254	..	169	211	220	OST
BEL	..	..	..	408	..	..	..	457	*BEL*
CAN	..	..	801	..	.				
DEN[a]	..	587	661	654	346	336	351	366	DEN
FIN[a]	851	1 000	1 000	1 000	257	304	338	413	FIN
FRA	..	..	296	324	299	..	302	329	FRA
GER	..	..	..	284	278	253	261	263	GER
GRE	370	399	451	521	228	242	390	353	GRE
					184	238	276	295	IRE
ITA[a]	473	480	497	511	309	276	261	260	ITA
JPN	851	866	898	865	399	378	374	358	JPN
NET[a]	400	432	497	565	..	254	383	348	NET
NZL	..	..	407	356	240	229	313	376	NZL
					..	175	172	178	NOR
POR	..	..	191	..	..	79	121	135	POR
SPA	..	..	329	345	..	242	278	304	*SPA*
SWE	..	..	789	728	..	672	650	701	SWE
					126	..	330	..	*SWI*
TUR[a]	..	..	..	214	..	..	113	125	TUR
UKM	..	..	362	364	..	..	313	333	*UKM*
USA	736	724	756	723	556	596	667	627	USA
YUG	467	601	700	719	226	..	290	278	YUG

a) Including those qualifying in studies not giving access to third level.

VIII. THIRD LEVEL GRADUATES

VIII.1. LEVEL 5

	Number of graduates (1984 = 100)				Number of graduates as a proportion of the age group				
	1975	1980	1984	1986	1975	1980	1984	1986	
OST	80	44	64	5 783	0.5	0.2	0.5	29	OST
BEL	68	66	..	24 915	110	103	..	164	*BEL*
CAN	57	78	60 531	98	78	100	131	143	CAN
DEN	..	86	8 863	98	..	103	112	103	DEN
FIN	82	99	11 750	107	116	156	154	168	FIN
FRA	..	..	108 315	117	..	..	124	147	FRA
GER	100	87	84 824	97	101	77	80	75	GER
GRE	50	81	9 609	117	36	53	65	75	GRE
					..	..	..	75	IRE
ITA	52	105	5 065	85	3	6	5	4	ITA
JPN	83	99	181 561	101	92	114	104	111	JPN
NET	58	86	45 585	90	116	160	177	165	NET
NZL	..	162	2 207	104	..	61	37	41	NZL
NOR	98	92	25 881	91	416	386	414	359	NOR
					..	10	16	..	POR
SPA	242	379	865	95	4	5	1	1	*SPA*
SWE	..	109	22 350	107	..	223	197	190	SWE
SWI	..	..	444	217	..	..	4	9	SWI
TUR	..	..	8 920	163	..	..	9	14	TUR
UKM	..	..	113 836	103	..	..	117	123	*UKM*
USA	80	89	452 416	103	85	90	110	123	USA
YUG	88	105	23 945	0	52	68	65	58	YUG

	Share in the total number of graduates			
	1975	1980	1984	1986
OST	0.7	0.3	0.6	25.6
BEL	52.5	43.9	..	51.2
CAN	25.1	29.3	32.4	29.9
DEN	..	41.3	46.6	46.0
FIN	45.5	52.3	54.9	56.9
FRA	..	..	40.1	40.6
GER	42.0	37.9	37.5	35.4
GRE	25.3	30.7	38.1	41.2
IRE	..	..	..	30.3
ITA	3.4	6.0	5.6	4.8
JPN	31.3	31.1	31.5	31.3
NET	68.0	78.2	75.4	70.1
NZL	..	31.0	20.1	20.4
NOR	72.5	65.3	63.3	61.8
POR	..	..	21.2	..
SPA	5.1	4.2	1.0	0.8
SWE	..	60.0	51.4	58.9
SWI	..	..	5.1	9.5
TUR	..	..	20.9	23.8
UKM	..	..	40.1	39.5
USA	21.6	23.2	24.9	25.5
YUG	45.7	42.3	41.5	40.8

a) 1986 = 100.

VIII.2. LEVEL 6

	Number of graduates (1984=100)				Number of graduates as a proportion of the age group				
	1975	1980	1984	1986	1975	1980	1984	1986	
OST	53	77	9 859	97	52	66	75	72	OST
BEL[a]	64	71	101	104	101	107	151	148	*BEL*
CAN	82	91	108 204	110	215	212	230	259	CAN
DEN[a]	116	106	10 146	101	157	144	134	128	DEN
FIN	122	111	9 006	97	130	128	119	116	FIN
FRA	..	..	112 201	119	..	..	132	153	FRA
GER	83	85	127 413	106	125	119	125	125	GER
GRE	91	107	15 196	101	105	115	110	108	GRE
					..	..	..	182	IRE
ITA	100	101	69 367	105	90	87	78	78	ITA
JPN	84	88	374 408	101	182	209	233	219	JPN
NET[a]	72	73	14 835	118	47	45	59	68	NET
NZL	74	92	6 861	92	99	116	114	112	NZL
NOR	63	85	10 417	97	108	143	169	162	NOR
SPA	46	88	83 928	115	74	122	133	147	*SPA*
SWE	80	76	20 204	77	140	136	186	136	SWE
SWI	81	..	6 134	101	54	..	62	59	SWI
TUR	..	..	30 960	140	..	..	33	45	TUR
UKM	63	75	132 725	103	108	120	142	141	*UKM*
USA	95	95	974 309	101	234	215	230	248	USA
YUG	74	102	30 735	92	59	83	81	76	YUG

	Share in the total number of graduates			
	1975	1980	1984	1986
OST	76.9	85.6	97.9	66.4
BEL[a]	47.5	44.8	..	48.8
CAN	64.6	60.9	57.9	60.1
DEN[a]	56.3	58.7	53.4	54.0
FIN	51.9	45.0	42.1	39.9
FRA	..	..	41.5	42.7
GER	52.4	55.9	56.3	58.0
GRE	72.5	64.3	60.2	56.3
IRE	..	..	..	69.7
ITA	88.5	80.0	76.5	81.2
JPN	65.3	57.0	64.9	64.7
LUX	..	..	..	..
NET[a]	27.3	21.5	24.6	29.9
NZL	..	54.8	62.4	56.1
NOR	18.6	24.2	25.5	26.3
POR	..	..	78.5	..
SPA	94.9	95.8	96.5	96.3
SWE	..	37.8	46.4	38.5
SWI	..	..	70.5	61.4
TUR	..	..	72.4	70.9
UKM	47.9	..	47.0	46.0
USA	55.4	53.7	53.6	54.0
YUG	49.7	52.7	53.2	53.5

a/ Including level 7.

VIII.3. LEVEL 7

	Number of graduates (1984=100)				Number of graduates as a proportion of the age group				
	1975	1980	1984	1986	1975	1980	1984	1986	
OST	226	186	676	110	15	12	5	5	OST
CAN	77	87	18 242	109	35	35	39	42	CAN
FIN	81	91	672	107	6	1	1	1	FIN
FRA	..	..	49 562	105	..	63	59	62	FRA
GER	81	86	14 133	110	13	14	15	15	GER
GRE	97	129	428	159	3	4	3	5	GRE
ITA	39	75	16 213	77	8	15	19	14	ITA
JPN	80	92	20 518	115	8	12	13	15	JPN
NZL	68	85	1 921	138	26	32	34	45	NZL
NOR	68	83	4 612	99	52	62	74	74	NOR
SPA	0	0	2 202	130	..	..	4	5	*SPA*
SWE	..	88	1 022	114	..	8	9	11	SWE
SWI	..	..	2 121	139	..	..	22	29	SWI
TUR	..	..	2 866	113	..	..	3	4	TUR
UKM	65	..	37 442	114		..	43	46	*UKM*
USA	98	102	391 879	101	102	93	90	93	USA
YUG	69	98	3 055	99	6	8	8	8	YUG

	Share in the total number of graduates			
	1975	1980	1984	1986
OST	22.4	14.1	6.7	5.1
CAN	10.2	9.8	9.8	10.0
FIN	2.6	2.7	3.1	3.3
FRA	..	20.0	18.4	16.7
GER	5.6	6.3	6.2	6.7
GRE	2.2	2.2	1.7	2.5
ITA	8.1	13.9	17.9	14.0
JAP	3.4	3.3	3.6	4.0
NZL	18.1	14.1	17.5	23.5
NOR	8.9	10.5	11.3	11.9
SPA	..	..	2.5	2.9
SWE	..	2.2	2.3	2.9
SWI	..	..	24.4	29.1
TUR	..	..	6.7	5.3
UKM	14.1	..	13.0	14.0
USA	23.0	23.2	21.5	21.6
YUG	4.6	5.0	5.3	5.7

IX. TEACHERS

IX.1. PRE-PRIMARY EDUCATION

	Total number of teachers (1984=100)				Percentage of women				
	1975	1980	1984	1986	1975	1980	1984	1986	
OST	..	..	7 941	108	..	..	100	100	OST
BEL	..	90	19 062	..	..	100	99	..	BEL
DEN	..	..	3 474	106	..	..	56	57	DEN
FRA*	77	89	74 967	98	00	99	97	96	*FRA
GRE	55	87	7 472	104	100	100	100	100	GRE
IRE*	85	93	5 121	97	..	..	76	76	IRE*
ITA	67	100	108 231	101	..	..	..	..	ITA
JPN	87	102	108 267	99	88	88	88	88	JPN
LUX	88	100	425	107					
NZL*	..	..	1 462	104	..	..	..	99	NZL*
NOR	30	77	21 791	117	..	..	..	96	NOR
POR	29	66	6 323	101	100	100	97	99	POR
SPA	63	92	38 793	101	99	97	94	96	*SPA*
TUR	..	..	3 329	189	..	..	98	100	TUR
UKM	..	..	..	..	..	..	..	100	*UKM*
					..	..	..	..	USA
YUG	52	86	34 231	115	95	94	94	94	YUG

	Percentage of part-time teachers				Percentage of women teaching part-time				
	1975	1980	1984	1986	1975	1980	1984	1986	
OST	..	..	10	11	..	..	10	11	OST
BEL	..	..	8	..	..	..	8	..	BEL
DEN	51	..	..	..	52	..	..	..	DEN
FRA*	..	..	6	7	..	..	6	7	*FRA
GRE	..	..	..	..	..	..	..	..	GRE
ITA	-	-	-	-	..	..	..	..	ITA
JAP	9	8	8	8	2	2	3	2	JPN
LUX	..	..	..	..	..	..	..	..	LUX
NOR	..	31	41	..	..	..	..	..	NOR
POR	..	..	..	..	..	..	..	..	POR
SPA	..	..	..	..	..	..	..	..	*SPA*
TUR	..	..	..	..	..	..	..	..	TUR
UKM	..	..	..	8	..	..	..	8	*UKM*
YUG	..	..	..	..	..	..	..	..	YUG

Full-time equivalents in the countries followed by an asterisk.

a/ Public education only.

IX.2. FIRST LEVEL EDUCATION

	Total numbers of teachers (1984=100)				Percentage of women				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	102 853	..	..	..	72	..	*AUS*
OST	..	84	28 175	101	..	75	79	80	OST
BEL	..	106	43 958	..	..	59	59	..	BEL
DEN	..	..	34 807	99	..	..	56	57	DEN
FIN*	107	103	44 400	104	..	..	..	..	FIN*
FRA	99	..	211 170	113	71	..	71	71	FRA
GER	..	..	136 154	96	..	..	78	79	GER
GRE	82	98	37 942	100	47	48	48	49	GRE
					..	..	..	..	ICE
IRE*	84	94	15 404	102	..	..	76	76	IRE*
ITA	92	99	276 553	97	83	87	89	90	ITA
JPN	88	100	471 724	97	55	57	56	56	JPN
LUX	101	103	1 663	06	47	49	48	49	LUX
NET**	101	108	78 847	108	64	64	62	63	NET*
NZL*	..	..	16 728	98	..	..	70	72	NZL*
NOR[c]	84	98	48 760	103	54	56	57	60	NOR[c]
POR	73	91	74 903	98	..	..	81	79	POR
SPA	..	96	117 730	99	58	..	71	73	*SPA*
SWE[c]	73	104	94 137	99	61	67	68	68	SWE[c]
					..	..	..	..	SWI
TUR	82	103	209 395	104	39	41	41	42	TUR
UKM	117	107	244 000	87	81	78	79	78	*UKM*
USA[d]	98	98	1 602 878	103	..	..	..	..	USA[d]
YUG	99	97	61 219	102	67	70	70	71	YUG

	Percentage of part-time teachers				Percentage of women teaching part-time				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	13	..	..	..	15	..	*AUS*
OST	..	..	..	14	..	..	..	14	OST
BEL	..	..	8	14	..	..	12	17	BEL
DEN	..	..	..	..	..	..	..	..	DEN
FIN*	..	..	..	..	..	..	..	..	FIN*
FRA	..	..	5	5	..	..	6	6	FRA
GER	..	..	5	3	..	..	4	3	GER
GRE	..	..	..	..	..	..	..	..	GRE
ITA	–	–	–	–	–	–	–	–	ITA
JPN	1	1	1	1	1	1	1	1	JPN
LUX	..	..	..	..	..	..	..	..	LUX
NET*	..	9	23	32	..	13	32	44	NET*
NOR[c]	28	35	37	34	46	55	56	50	NOR[c]
POR	..	..	..	..	..	..	..	..	POR
SPA	..	..	..	..	..	..	..	..	*SPA*
SWE[c]	11	12	9	8	14	..	10	9	SWE[c]
TUR	..	..	..	..	..	..	..	..	TUR
UKM	10	9	10	9	12	11	13	11	*UKM*
USA[d]	..	..	..	..	..	..	..	..	USA[d]
YUG	0	0	1	1	0	1	1	1	YUG

Full-time equivalents for the countries followed by an asterisk.

a) First level and second level general education.

b) Basic education (pre-primary and first level).

c) First level and second level-first stage.

d) Pre-primary and grades 1 to 8.

IX.3. SECOND LEVEL EDUCATION

	Total numbers of teachers (1984=100)				Percentage of women				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	103 064	..	..	..	48	..	*AUS*
OST	..	95	48 415	191	..	54	57	56	OST
BEL	..	..	..	96	..	..	..	51	BEL
CAN*	..	..	295 365	102	..	..	59	58	*CAN
DEN	..	..	28 526	110	..	..	56	58	DEN
FRA	'86	..	397 410	102	..	..	56	57	FRA
GER	..	..	483 327	94	29	29	42	41	GER
GRE	..	82	48 217	107	..	49	53	53	GRE
IRE*	82	95	20 228	102	..	..	..	..	IRE*
ITA	79	95	547 148	105	..	58	60	61	ITA
JPN	85	92	603 098	105	24	26	28	28	JPN
LUX	79	91	2 133	105	22	25	29	29	LUX
NET*[b]	94	103	41 551	104	19	19	20	21	*NET*
NZL*[c]	..	..	18 923	102	40	37	46	48	*NZL*
NOR	71	93	23 133	104	32	33	33	34	NOR
POR	70	96	37 303	95	..	..	..	..	POR
SPA	..	..	202 089	103	..	..	43	47	*SPA*
SWE[c]	69	91	27 809	97	41	44	44	43	[c]SWE
TUR	..	84	132 913	110	..	35	36	37	TUR
UKM	94	101	329 000	93	48	49	50	50	*UKM*
USA[d]	97	103	860 549	104	..	..	..	..	[d]USA
YUG	98	100	131 570	102	49	49	50	51	YUG

	Percentage of part-time teachers				Percentage of women teaching part-time				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	..	11	..	..	..	16	..	*AUS*
OST	..	..	..	42	..	..	..	42	OST
BEL	..	..	..	25	..	..	..	36	BEL
CAN*	..	..	10	11	..	..	15	17	*CAN
DEN	..	..	..	..	..	..	..	..	DEN
FRA	..	..	15	15	..	..	21	21	FRA
GER	41*	39*	17	12	31	38	17	13	GER
GRE	..	4	..	..	..	1	..	..	GRE
ITA	..	..	..	..	..	..	..	..	ITA
JPN	10	10	10	11	14	15	15	16	JPN
LUX	..	..	..	..	..	..	..	..	LUX
NET*	..	21	23	32	..	46	46	68	*NET
NOR[c]	34	31	26	24	47	49	47	42	[c]NOR
POR	..	..	..	..	..	..	..	..	POR
SPA	..	..	..	..	..	..	..	..	*SPA*
SWE[c]	12	10	9	8	21	..	13	12	[c]SWE
TUR	..	..	..	..	..	..	..	..	TUR
UKM	..	..	*19*	*20*	..	..	*20*	*22*	*UKM*
USA[d]	..	..	..	..	..	..	..	..	[d]USA
YUG	8	12	11	12	7	11	11	13	YUG

Full-time equivalents in the countries followed by an asterisk.

a) Pre-primary, first and second levels.

b) General education only.

c) Second level-second stage.

d) Grades 9 to 12.

e) Vocational/technical education only.

X. (X.1. and X.2) PUBLIC EXPENDITURE ON EDUCATION AND TOTAL PUBLIC EXPENDITURE

	Total public expenditure as a percentage of GDP				Public expenditure on education as a percentage of total public expenditure				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	33.6	33.7	38.6	38.7	17.5	16.1	15.8	13.6	*AUS*
OST	46.1	48.9	50.8	52.7	12.4	11.2	11.3	11.4	OST
BEL	44.5	50.7	54.1	53.4	..	11.7	11.6	10.1	BEL
CAN	40.1	40.5	46.8	46.6	18.8	17.7	15.2	15.6	CAN
DEN	48.2	56.2	60.3	55.7	16.1	11.8	9.1	8.8	DEN
FIN	36.1	36.6	39.8	42.2	..	14.8	13.5	13.6	FIN
FRA	43.4	46.1	52.0	51.6	12.0	11.0	11.1	10.9	FRA
GER	48.9	48.3	48.0	46.9	11.3	10.6	9.4	9.3	GER
GRE	27.4	30.5	34.8	35.7	7.0	..	7.6	7.6	GRE
IRL	46.5	50.8	53.9	55.1	13.1	12.6	10.5	10.6	IRL
ITA	..	41.7	49.3	50.9	..	10.4	10.3	..	ITA
JPN	27.2	32.6	33.2	33.1	17.7	15.0	13.5	12.8	JPN
LUX	48.5	54.8	51.8	52.3	14.3	13.4	12.7	13.3	LUX
NET	52.8	57.5	61.0	59.6	14.5	12.8	10.5	11.0	NET
NZL	..	..	..	..	..	..	..	..	NZL
NOR	46.2	48.3	46.3	49.9	15.5	13.2	13.1	12.7	NOR
POR	..	25.9	44.4	43.9	..	15.8	9.1	9.3	POR
SPA	..	32.9	39.3	41.7					
SWE	..	61.6	63.5	63.0	..	13.7	11.4	11.0	SWE
SWI	32.1	32.8	34.7	35.0	16.4	15.9	15.0	14.5	*SWI*
TUR	..	..	..	..					
UKM	46.6	44.9	47.5	45.5	14.3	12.4	10.9	11.0	*UKM*
USA	34.6	33.7	35.8	37.0	15.4	13.9	12.5	12.7	USA
YUG	..	..	..	..					

	Public expenditure on education as a percentage of GDP				Private expenditure on education as a percentage of GDP				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	5.9	5.4	5.6	5.3	..	..	0.3	0.4	*AUS*
OST	5.7	5.5	5.8	6.1	0.2	..	..	..	OST
BEL	..	5.8	5.9	5.4	..	..	..	..	BEL
CAN	7.1	6.8	6.5	6.7	0.6	0.5	0.6	0.6	CAN
DEN	7.8	6.6	..	7.1	..	..	..	0.1	DEN
FIN	..	5.2	5.0	5.3	..	..	0.4	0.5	FIN
FRA	5.2	5.1	5.7	5.6	1.0	1.0	1.1	1.0	FRA
GER	5.4	5.0	4.4	4.3	0.1	0.1	0.2	0.2	GER
GRE	1.8	2.3	2.6	2.7	0.4	0.3	0.2	0.2	GRE
IRL	6.1	6.4	5.7	5.8	0.1	0.2	0.3	0.3	IRL
ITA	4.1	4.4	5.1	..	..	..	..	..	ITA
JPN	5.4	5.7	5.3	5.0	1.0	1.4	1.3	1.4	JPN
LUX	6.9	7.4	6.6	7.0	..	..	..	..	LUX
NET	8.1	7.7	6.7	6.6	0.1	0.2	0.2	0.2	NET
NZL	..	5.7	4.5	4.9	..	..	..	..	NZL
NOR	6.6	6.9	6.3	6.6	0.1	0.1	0.1	0.2	NOR
POR	..	4.2	4.1	4.1	..	..	..	..	POR
SPA	..	..	..	..					
SWE	6.6	9.0	7.7	7.3	..	..	..	..	SWE
SWI	5.3	5.2	5.2	5.1	0.1	0.1	0.1	0.1	*SWI*
TUR	..	2.7	2.5	2.0	..	..	..	..	TUR
UKM	..	..	5.2	5.0	..	..	..	..	UKM
USA	5.4	4.8	4.5	4.8	1.4	1.4	1.6	1.7	USA
YUG	4.1	..	3.5	3.5	0.2	..	..	..	YUG

X.3. BREAKDOWN OF PUBLIC EXPENDITURE ON PUBLIC EDUCATION BY LEVEL (%)

	Pre-primary				First level				
	1975	1980	1984	1986	1975	1980	1984	1986	
AUS	..	1.2	1.7	1.2	..	71.7	66.7	62.1	*AUS*
OST	1.3	6.6	6.7	6.8	25.6	19.5	20.4	19.4	OST
					..	28.2	28.2	28.1	BEL[a]
					68.6	70.2	67.8	67.4	CAN[a]
					64.7	59.7	61.5	60.9	DEN[a]
					35.7	34.8	33.3	34.2	FIN
FRA	9.4	10.0	12.2	12.7	27.4	26.9	24.4	23.7	FRA
GER	1.7	2.3	2.6	2.8	19.3	17.3	16.8	16.6	GER
GRE	3.4	4.7	5.4	5.9	39.2	35.2	30.3	29.3	GRE
IRL	9.9	9.7	10.7	10.1	29.5	29.2	30.5	30.2	IRL
ITA	5.3	7.1	8.6	..	33.1	32.3	29.0	..	ITA
JPN	1.4	1.4	1.3	1.3	45.0	45.8	41.7	41.3	JPN
LUX	..	..	..	2.9	63.1[b]	61.9[b]	60.4[b]	57.6	LUX
NET	6.3	6.4	6.2	..	22.4	22.3	19.6	27.3[b]	NET
NZL	1.6	1.6	1.6	2.0	39.4	37.2	40.2	37.7	NZL
					57.7	56.9	54.5	52.8	NOR[a]
POR	..	..	..	2.2	59.2[b]	58.9[b]	56.7[b]	53.3	POR
SWE	..	0.1	0.1	0.1	60.0	66.1	58.9	59.8	SWE[a]
SWI	2.9	2.8	3.1	3.2	78.5	76.3	76.1	75.7	SWI[a]
					43.3	46.1	50.7	47.8	TUR[a]
UKM	..	..	3.0	3.3	31.7	29.4	25.2	26.4	*UKM*
					46.3	45.5	46.4	46.5	USA[a]
					54.6	53.3	55.4	55.5	YUG[a]

	Second level				Third level				
	1975	1980	1984	1986	1975	1980	1984	1986	
					..	27.1	31.7	36.6	*AUS*
OST	56.6	58.0	54.2	52.3	16.4	15.9	18.7	21.5	OST
BEL	..	52.6	53.7	52.4	..	19.2	18.2	19.5	BEL
					31.4	29.8	32.2	32.6	CAN
DEN[f]	14.5	20.7	20.4	21.0	20.8	19.6	18.1	18.2	DAN
FIN[g]	38.1	44.6	46.6	45.5	26.2	20.7	20.1	20.3	FIN
FRA	45.7	46.9	47.2	47.5	17.4	16.2	16.1	16.1	FRA
GER	51.6	55.2	55.9	55.7	27.5	25.2	24.7	25.0	GER
GRE	30.5	36.5	40.0	40.8	26.9	23.6	24.3	24.0	GRE
IRL	41.3	42.5	41.8	41.3	19.4	18.6	17.0	18.4	IRL
ITA	46.8	51.2	45.1	..	14.7	9.4	17.4	..	ITA
JPN	41.5	40.1	43.7	43.7	12.1	12.7	13.4	13.7	JPN
LUX	35.2	36.2	37.5	37.0	1.7	1.8	2.0	2.4	LUX
NET	40.0	39.1	42.6	41.4	31.3	32.3	31.6	31.4	NET
NZL	32.3	36.0	40.9	42.8	26.7	25.2	17.3	17.5	NZL
NOR[i]	26.7	27.3	29.8	30.4	15.6	15.8	15.7	16.8	NOR
POR	30.3	29.0	30.2	29.8	10.5	12.1	13.1	14.7	POR
SWE[i]	20.8	20.0	25.0	23.9	19.2	13.8	16.0	16.2	SWE
					18.6	20.8	20.8	21:1	SWI
TUR[i]	32.1	24.1	23.6	24.3	24.7	29.8	25.7	27.9	TUR
UKM	44.5	45.0	47.1	49.5	23.3	25.1	24.8	20.9	*UKM*
USA[a]	32.1	32.5	31.8	31.5	21.5	21.9	21.8	22.1	USA
YUG[i]	28.4	26.5	27.5	26.9	17.0	20.2	17.1	17.7	YUG

a) First and second levels.
b) Pre-primary and first level.
c) Pre-primary, first and second levels.
d) First level and second level-first stage.
e) Pre-primary and grades 1 to 8.
f) Second level-second stage only.
g) Including various level 5 courses of third level.
h) Grades 9 to 12.
i) Excluding various programmes of level 5.

X.4. PUBLIC EXPENDITURE PER PUPIL/STUDENT IN PUBLIC EDUCATION

	Pre-primary				First level				
	1975	1980	1984	1986	1975	1980	1984	1986	
					..	..	..	17.8	*AUS
OST	3.9	18.1	18.2	17.5	15.9	16.4	21.1	21.3	OST
					..	..	..	..	BEL
					18.0	21.0	21.7	21.3	CAN
					..	24.7	27.0	25.4	DEN
					25.4	..	..	21.6	FIN
FRA	..	..	12.6	12.2	..	..	15.2	15.0	FRA
					11.3	..	15.7	15.1	GER
GRE	5.9	7.8	9.1	10.5	7.3	9.1	9.3	9.6	GRE
IRL	11.5	12.9	13.7	13.2					
ITA	15.5	12.9	17.1	..					
JPN	13.0	11.6	12.1	12.9					
NET	10.2	13.1	11.4	..	113.3	95.6	74.4	77.0[b]	NET
					116.0	51.4	47.2	53.0	NOR
					..	..	..	..	NZL
POR	..	..	..	13.1	40.8[b]	46.6[b]	46.4[b]	59.6	POR
					17.4	..	..	..	SPA
SWE	..	0.1	0.1	0.1	..	34.2	39.4	38.8	SWE
SWI	7.8	7.3	8.1	7.8	91.4	82.0	71.5	66.8	SWI
					..	..	..	..	TUR
UKM	..	..	15.0	17.3	..	..	65.7	79.7	*UKM*
					26.9	25.3	21.1	23.6	USA
					..	..	..	..	YUG

	Second level				Third level				
	1975	1980	1984	1986	1975	1980	1984	1986	
OST	25.9	28.5	31.4	32.9					
BEL	..	..	..	..	..	..	..	..	BEL
					57.2	49.2	42.1	41.2	CAN
DEN[f]	..	79.5	70.3	73.1	..	68.5	55.9	50.0	DEN
FIN[g]	31.3	..	..	29.3	92.1	..	..	38.0	FIN
FRA	..	..	24.9	23.9	..	..	30.3	28.4	FRA
GER	16.4	..	16.9	17.9					
GRE	8.8	11.4	13.4	13.6	38.7	43.5	37.5	32.4	GRE
IRL	23.4	25.3	23.5	23.0	92.9	81.1	62.4	63.3	IRL
ITA	18.9	21.8	19.9	..	30.6	20.2	36.8	..	ITA
JPN	28.4	26.3	24.0	21.6	130.0	127.6	115.9	109.0	JPN
LUX	..	29.3	27.8	33.0					
NET	26.1	23.4	21.4	21.2	113.3	95.6	74.4	77.0	NET
NZL	..	..	..	..	..	..	..	..	NZL
NOR[f]	39.9	36.0	32.7	36.0	116.0	51.4	47.2	53.0	NOR
POR	24.7	19.3	19.3	18.3	40.8	46.6	46.6	59.6	POR
SWE[f]	32.8	33.4	38.0	37.7	..	34.2	39.4	38.8	SWE
					91.4	82.0	71.5	66.8	SWI
UKM	..	..	22.9	27.1	..	..	96.0	79.7	*UKM*
USA[h]	22.7	24.7	24.4	25.8	26.9	25.3	21.1	23.6	USA
					..	..	..	..	YUG

a) First and second levels.
b) Pre-primary and first level.
c) Pre-primary, first and second levels.
d) First level and second level - first stage.
e) Pre-primary plus one or two years primary education.
f) Second level - second stage only.
g) Including some programmes of level 5, third level.
h) Grades 9 to 12.

B. DETAILLED DATA FOR 1987-88

1. PUPILS

1.1. PUPILS IN PRE-PRIMARY EDUCATION in 1987-88

	Total	% girls	% of pupils in the private sector
Austria	192 571	48.8	26.1
Belgium	371 509	48.8	57.9
Canada	440 623	48.7	3.9
Denmark	51 988	49.1	8.6
Finland	99 442	..	69.0
France	2 518 602	48.7	12.3
Germany	1 660 284	48.5	..
Greece[a]	155 527	48.9	4.7
Ireland	142 018	48.5	1.3
Italy	1 586 850	48.9	30.5
Japan	2 016 224	49.0	76.3
Luxembourg	7 983	..	..
Netherlands[b]	338 721	49.1	..
New Zealand	61 727	48.7	0.4
Norway	110 981	..	35.3
Portugal[a]	104 438	48.2	20.7
Spain	1 054 241	49.1	37.1
Sweden	..	..	..
Switzerland	132 879	48.7	5.2
Turkey	103 204	47.4	6.5
United Kingdom	694 000	49.0	5.8
United States[a]	6 515 000	47.9	36.1
Yugoslavia	396 889	48.2	..

a/ 1986-87.

b/ Pupils in basic education (pre-primary and first level) aged 3 to 5.

1.2. PUPILS IN FIRST LEVEL AND SECOND LEVEL-FIRST STAGE EDUCATION in 1987-88

	First level		Second level - first stage		% of pupils in the private sector	
	Total	% girls	Total	% girls	1st level	2nd level - 1st stage
Australia	1 687 390	48.6	682 388	48.7	24.5	29.8
Austria	350 734	48.4	359 713	48.5	3.8	6.0
Belgium	728 718	49.1	..	..	55.6	..
Canada	2 290 535	48.2	1 115 573	48.7	3.5	6.6
Denmark	380 049	48.9	258 285	49.2	9.2	15.9
Finland	390 469	48.8	185 336	49.2	..	..
France	4 081 479	48.6	3 470 827	49.3	15.1	20.7
Germany	2 323 968	49.0	3 485 960	49.3	1.7	7.0
Greece[a]	865 660	48.4	455 283	47.3	6.0	3.4
Ireland	423 402	48.8	207 992	48.9	1.6	-
Italy	3 370 509	48.6	2 618 679	47.5	7.4	4.2
Japan	10 226 323	48.8	6 081 330	48.8	0.6	3.1
Luxembourg	23 375	49.3	12 814	52.5	0.9	10.7
Netherlands	1 092 707[b]	49.5	820 268	48.0	68.7	79.0
New Zealand	324 371	48.4	227 795	49.0	2.2	4.3
Norway	317 228	48.8	186 464	48.9	1.0	0.9
Portugal[a]	1 178 639	..	351 224	..	6.4	9.4
Spain	3 246 655	48.2	2 331 455	49.5	33.6	34.0
Sweden	593 265		334 744	48.5	0.8	0.8
Switzerland	375 302	49.1	289 918	49.3	2.4	5.0
Turkey	6 880 304	47.1	2 091 790	35.2	0.5	2.7
United Kingdom	4 370 000	48.8	2 052 000	48.8	4.7	8.3
United States[a]	20 598 000	48.4	10 079 000	49.1	11.2	..
Yugoslavia	1 432 452	48.5	1 410 801	48.1	..	..

a/ 1986-87.

b/ Pupils in basic education (pre-primary and first level) aged 6 and over.

1.3. PUPILS IN SECOND LEVEL-SECOND STAGE EDUCATION (full-time) in 1987-88

	General or comprehensive		Vocational/technical[a]		% of pupils in the private sector	
	Total	% girls	Total	% girls	General	Voc./technical
Australia[b]	610 319	50.6	-	-	30.9	-
Austria	95 135	47.5	171 909	53.3	10.9	21.5
Belgium	433 264	50.8	372 383	46.9	66.7	60.8
Canada	1 124 499	49.0	-	-	5.0	-
Denmark	70 750	58.3	156 807[c]	44.4	9.1	
Finland	102 154	59.3	151 131[d]	50.7	5.2	
France	971 228	57.7	1 125 205	47.3	23.0	22.5
Germany	606 408	49.7	2 374 734[c]	45.6	11.4	3.7
Greece[e]	267 138	55.2	113 424	29.3	3.9	..
Ireland	111 130	52.5	23 669	63.1	..	..
Italie	671 470	54.6	2 047 863	48.2	14.7	6.3
Japan	3 926 351	50.7	1 480 188	45.6	29.0	25.1
Luxembourg	3 967	55.1	8 797	44.8	3.9	11.3
Netherlands	226 374	52.0	295 601	45.9	71.5	87.1
New Zealand	113 113	50.2	3 235	76.7	5.8	-
Norway	80 233	54.9	103 390	48.5	7.5	6.7
Portugal[e]	193 436	53.8	7 473	..	6.6	..
Spain	1 356 607	53.3	1 110 275	50.1	29.4	25.8
Sweden	65 147	64.0	219 969	46.6	3.1	1.8
Switzerland	62 709	51.1	35 699	485.3	11.6	23.5
Turkey	586 386	43.2	501 133	29.3	3.5	0.2
United Kingdom[f]	2 034 000	49.2	423 000	54.4	10.5	..
United States	10 357 000	48.8	-	-	..	-
Yugoslavia	243 128	50.7	704 135	45.7	..	0.2

a) Including teacher training.
b) Including pupils for whom the year/grade of second level education was not specified and excluding Technical and Further Education (TAFE).
c) Including part-time education (apprenticeship).
d) Including students enrolled in third level programmes.
e) 1986-87.
f) General = programmes provided by schools. Vocational/technical = public non-advanced further education (NAFE) programmes.

1.4. PUPILS IN PART-TIME EDUCATION in 1987-88

	Second level Vocation/technical		Apprenticeship		TOTAL[a]	
	Total	% girls	Total	% girls	Total	% girls
Australia	..	..	137 600[b]	..	..	..
Austria	–	–	164 062	34.6	164 062	34.6
Belgium[c]	.	..	..	..	87 344	58.2
France	–	–	213 729	28.1	227 833	28.7
Germany	25 580	8.8	..	..	25 580	8.8
Ireland	5 416	46.8	8 904	7.2	14 320	22.2
Japan	56 565	22.8	–	–	148 033	31.9
Luxembourg	3 134	38.3	–	–	3 134	38.3
New Zealand	48 254	40.5	–	–	48 254	40.5
Norway	9 155	30.6	25 850	..	35 690	9.2
Switzerland	4 178	39.7	208 840	39.1	215 190	39.2
United Kingdom[d]	1 502 000	54.6	–	–	1 502 000	54.6

a) Including other types of part-time education.
b) Subject to high sampling variability.
c) Not including pupils aged 24 or more.
d) Public non-advanced further education (NAFE) programmes.

1.5. PUPILS IN SPECIAL EDUCATION[a] in 1987-88

	Total	% girls	% of pupils in the private sector
Australia	22 156	39.0	13.2
Austria	628	42.5	..
Belgium	59 855	37.1	58.0
France	87 204	35.9	..
Germany	259 700	38.6	16.0
Greece[b]	8 150	40.0	26.1
Ireland	8 575	40.5	..
Japan	96 028	37.7	0.9
Netherlands[c]	106 306	31.9	72.3
Norway	10 061	41.3	..
Spain	41 231	40.6	51.7
Sweden	11 243	..	..
Switzerland	33 160	38.7	1.8
Turkey	6 256	33.6	..
United Kingdom	122 297	35.9	5.6
Yugoslavia	27 256	38.3	..

a) Except where otherwise stated, the data above refer only to pupils attending special schools, since those receiving special education in ordinary schools should already be counted with the other pupils.
b) 1986-87.
c) All special education is provided inside the regular school system but the pupils concerned are not included in the other tables.

GENERAL DEFINITIONS

Pre-primary education is provided, on a full-time or part-time basis, in nursery schools, kindergartens or similar institutions or in sections attached to primary schools. Day nurseries, crèches, childcare centres or similar organisations whose primary function is not educational, are not included.

First level education, which is compulsory in every country, begins at age five, six or seven and lasts for some five or six years. In countries providing what they term a "basic education", generally covering the entire period of compulsory education, only the first six years are considered as first level education.

N.B. First level education lasts four years in Germany, Austria, and in certain Swiss cantons. It is of seven years in two of the Australian states. Only the first four years of the Yugoslav basic eight-year education system have been counted as "first level". For both the United States and Canada, where elementary education lasts between six and eight years (depending on the school in the United States and the province in Canada), the first six years only have been counted.

Second level-first stage education is provided for pupils who have already completed first level education as defined above. This level corresponds very often to the end of compulsory schooling. In most countries this consists of a general education, although some (France, Greece, the Netherlands) also provide vocational education which it would be more accurate to describe, at this stage, as "pre-vocational" since it is not really intended to prepare pupils for a particular trade or job.

N.B. For some countries, there is no evident separation of the second level into two stages. For the purpose of international comparisons, the seventh, eighth and ninth grades in Australia (in those states where the seventh grade is not included in the first level), Canada, and the United States are considered as corresponding to the first stage.

Second level-second stage education refers to general, technical and vocational education, and teacher training provided for students who have already completed second level-first stage education. It may either be "terminal" (i.e. preparing students for entry directly into working life) or it may prepare students for third level education in the university or non-university sectors.

N.B. In countries where secondary education cannot be separated into two levels (Australia, Canada and the United States), the years following the ninth grade are counted as constituting the second stage. For Belgium, the data refer to the second level as a whole. It is to be noted that although apprenticeship may be full-time, the educational element is not, and so it is considered as part-time education.

General education is the term used to denote education that is not intended to prepare students directly for a particular trade or job. In most countries it is still this type of education which provides students with the best chances of gaining entry to third level education, and universities in particular. Comprehensive education has been included in this category.

Teacher training at the second level is intended to provide training for teachers, generally for the pre-primary and primary levels. It now exists in only a few countries: Austria, Greece, Italy, Switzerland, Turkey and Yugoslavia, as well as in the Netherlands and Norway where, however, the numbers enrolled are very small.

Vocational/technical education covers education designed to train students for a particular occupation or group of related occupations.

Part-time second level education is education organised in such a way that students can exercise another activity, either full-time or part-time. In most cases, but not always, this education is of a vocational character. It may be similar to full-time education of the same type (e.g. evening classes) or specially designed. Only education organised within the framework of the formal education system is covered here.

N.B. Apprenticeships are full-time training leading to a qualification. In some countries, this is the same as that obtained at the end of full-time vocational education. Here, apprenticeships are considered as part-time since only part of the overall training takes place in a mainstream or specialised educational establishment. This obviously has implications for expenditure and, in particular, the number of teachers involved. The same applies to linked work and training where full-time education for a period of less than an academic year may be combined with another activity, usually vocational in nature, during the rest.

Special education is designed for children with certain mental or physical disabilities or personality disorders that make it difficult for them to participate in normal education. This type of education may be provided in regular classes, in special classes of regular schools, or in special schools.

Other data available, when provided by the countries

For each level and type of education: Official entrance age. Duration of education. Number of institutions. Distribution of pupils by grade, age and sex. Number of repeaters. All the data are available separately for the public and the private sector.

2. TEACHERS

2.1. TEACHERS IN PRE-PRIMARY EDUCATION in 1987-88

	Number of teachers		% part-time		Full-time equivalents	
	Total	% women	Total	% women	Total	% women
Austria	8 754	99.6	10.9	10.8	..	..
Denmark	..	..	..	..	3 320	..
Finland	..	..	..	..	8 563	..
France[a]	73 325	95.9	6.8	6.9	70 824	95.9
Germany	5 235	91.7	13.3	11.2	..	..
Greece[b]	7 774	100.0	..	..	..	..
Ireland	4 966	76.2	0.6	0.7	4 945	76.2
Italy	109 500	..	..	..	109 500	..
Japan	107 498	87.9	8.3	2.7	..	..
New Zealand	..	..	..	..	1 581	99.0
Norway	8 669	96.4	..	..	..	..
Portugal[b]	5 640	..	..	..	..	..
Spain	39 513	93.5	..	..	..	..
Turkey	6 192	99.9	..	..	..	..
United Kingdom	26 000	100.0	7.7	7.7	25 000	100.0
Yugoslavia	40 135	94.9	..	..	40 315	94.5

a) Public sector only.
b) 1986-87.

2.2. TEACHERS IN FIRST LEVEL EDUCATION in 1987-88

	Number of teachers		% part-time		Full-time equivalents	
	Total	% women	Total	% women	Total	% women
Australia	..	..	..	..	91 252	71.4
Austria	33 330	80.6	14.0	14.0	..	..
Belgium	71 064	74.7	15.4	18.5	66 127	73.6
Canada[a]	87 465	68.9	10.6	13.0	83 200	68.0
Denmark	..	..	..	..	32 607	..
France[b]	202 348	67.0	3.5	4.8	198 822	66.5
Germany	134 099	79.6	3.9	3.5	..	..
Greece[c]	37 947	49.3	..	..	..	..
Ireland	15 880	76.3	0.7	0.9	15 801	76.3
Italy	263 101	89.8	..	..	263 101	89.8
Japan	452 220	56.6	0.7	0.8	..	..
Luxembourg[d]	..	..	..	..	..	..
Netherlands	84 006	63.3	63.3	47.9	68 149	57.3
New Zealand	..	..	..	..	16 169	73.2
Norway	51 697	61.3	33.5	47.5	..	..
Portugal[c]	70 897	..	..	..	..	..
Spain	114 343	73.1	..	..	..	..
Sweden	92 664	68.1	..	..	82 355	..
Turkey	220 943	41.6	..	..	..	..
United Kingdom	215 000	78.1	9.3	11.3	204 000	77.5
United States[c]	..	..	..	..	1 062 000	..
Yugoslavia	62 537	71.5	1.2	1.3	..	..

a) The figures refer only to teachers in schools providing education solely at the pre-primary level and the first six grades. These schools cater for about 50 per cent of the total number of pupils enrolled in first level education. The data for teachers in schools that provide both first and second level education are the following:
91 139 65.6 16.9 22.6 82 700 64.0
b) Public sector only.
c) 1986-87.
d) 1986-87. Public sector only.

2.3. TEACHERS IN SECOND LEVEL-FIRST STAGE EDUCATION in 1987-88

	Number of teachers		% part-time		Full-time equivalents	
	Total	% women	Total	% women	Total	% women
Austria	55 196	59.9	39.8	39.2	..	..
Denmark	..	..	..	..	29 973	..
France[a]	178 870	60.9	12.1	16.9	..	..
Germany	282 744	45.7	9.7	9.9	..	..
Greece[b]	26 186	62.2	..	..	..	..
Italy	296 000	68.4	..	..	296 000	68.4
Japan	306 782	35.3	4.8	6.3	..	..
New Zealand	..	..	..	..	4 636	54.1
Portugal[b]	41 272	..	..	..	..	..
Spain	81 307	48.2	..	..	..	..
Turkey	42 780	32.6	..	..	..	..
United Kingdom	123 000	50.4	8.9	14.5	117 000	47.0
Yugoslavia	77 820	54.2	10.3	11.4	..	..

a/ Public sector only.
b/ 1986-87.

2.4. TEACHERS IN SECOND LEVEL-SECOND STAGE GENERAL EDUCATION in 1987-88

	Number of teachers		% part-time		Full-time equivalents	
	Total	% women	Total	% women	Total	% women
Australia	..	..	..	..	102 436	48.0
Austria	19 322	52.7	89.5	90.4	..	..
Belgium	114 628	52.8	25.5	36.9	104 511	50.5
Canada[a]	128 502	46.3	12.5	21.9	120 124	39.8
France[b]	95 020	49.7	12.1	18.6	..	..
Germany	66 814	35.0	11.7	13.7	..	..
Greece[c]	17 976	47.6	..	..	..	..
Ireland[d]	19 314	50.6	..	..	20 350	..
Italy	57 100	63.5	..	..	57 100	63.5
Japan	334 840	22.5	16.8	29.8	..	..
Luxembourg	..	..	..	..	1 977	..
Netherlands	50 963	27.6	42.3	82.9	42 224	23.5
New Zealand	..	..	..	..	14 905	46.7
Norway	24 021	34.6	24.3	41.2	18 185	26.9
Spain	81 498	50.9	22.4	..	..	..
Sweden	27 362	43.8	..	..	22 579	39.9
Turkey	55 707	41.1	..	..	..	..
United Kingdom	174 000	50.6	8.6	14.8	166 000	47.6
United States[c]	..	..	..	..	909 000	..
Yugoslavia	57 788	48.3	15.6	15.7	..	..

a/ The figures refer only to teachers in schools providing education solely at grades 7 to 13. These schools cater for about 80 per cent of the total number of pupils enrolled in second level education. The data for teachers in schools that provide both first level and second level education are the following:

	91 139	65.6	16.9	22.6	82 700	64.0

b/ Public sector only.
c/ 1986-87.
d/ Public sector only. The number of teachers refers to full-time teachers only.

2.5. TEACHERS IN SECOND LEVEL-SECOND STAGE VOCATIONAL/TECHNICAL EDUCATION AND TEACHER TRAINING in 1987-88

	Number of teachers		% part-time		Full-time equivalents	
	Total	% women	Total	% women	Total	% women
Austria	17 935	48.7	..	..	..	..
Finland	16 638	..	..	..	..	..
France[a]	57 204	42.6	9.8	16.4	..	..
Germany	103 227	31.2	19.4	21.9	..	..
Greece[b]	7 544	34.9	..	..	..	..
Ireland[c]	102	16.7	18.4	45.2	..	..
Italy	224 640	50.7	..	..	224 640	50.7
Netherlands	47 039	29.3	39.6	75.9	38 623	23.6
Spain	55 045	38.5	..	..	..	..
Turkey	46 056	36.4	..	..	..	..
United Kingdom	101 000	43.6	36.6	61.4	82 000	37.8
Yugoslavia	280	11.4	46.8	50.0	..	..

a) Public sector only.
b) 1986-87.
c) Public sector only. The number of teachers refers to full-time teachers only.

2.6. TEACHERS IN SPECIAL EDUCATION in 1987-88

	Number of teachers		% part-time		Full-time equivalents	
	Total	% women	Total	% women	Total	% women
Australia	..	..	..	..	4 828	75.6
Belgium	15 858	60.7	18.5	25.7	14 613	58.7
France	12 569	..	..	..	..	..
Germany	44 746	63.2	6.2	6.5	..	..
Greece[a]	1 044	58.9	..	..	..	..
Ireland	916	76.2	-	-	916	76.2
Japan	42 363	50.0	2.9	3.0	..	..
Netherlands[b]	14 759	49.9	32.5	51.0	12 364	43.8
New Zealand[c]	..	..	..	..	774	82.8
Norway	4 237	67.9	..	..	985	85.4
Spain	5 514	69.2	..	..	..	..
Sweden	4 094	76.9	..	..	..	..
Turkey	784	36.4	..	..	..	..
United Kingdom	21 270	69.0	8.3	10.8	20 382	68.3
Yugoslavia	4 636	71.7	6.6	4.8	..	..

a) 1986-87.
b) All special education is provided inside the regular school system but the teachers concerned are not included in the other tables.
c) Public sector only.

GENERAL DEFINITIONS

Teaching staff: total number of teachers, both full-time and part-time, including supply teachers but excluding administrative staff with no teaching duties.

Full-time teachers are those who work the statutory number of hours required for the category to which they belong.

Part-time teachers are those who work for less than the statutorily required number of hours. Teachers who teach at several levels are, in principle, counted as part-time teachers for each level in proportion to the numbers of hours involved. Similarly, teachers doing overtime are normally counted as both full-time teachers and part-time teachers.

Full-time equivalents are in principle calculated by totalling the number of hours, including overtime, worked by all the teachers in a given category, and dividing this figure by the number of statutory hours required for that category. However, certain countries may use other methods of calculation.

N.B. International comparisons with respect to *teaching staff* are certainly among the hardest to make. The term "teacher" itself does not necessarily have the same meaning from country to country. Methods of recruitment and required qualifications can also differ within countries: several categories of teacher with different qualifications and duties may be working alongside one another at the same level. In some countries a particular category of teachers may be allowed to teach only at a particular level, whereas in others a teacher may be assignable to more than one level. In addition to these conceptual difficulties, further difficulties arise from differences in the way in which both pupils and teachers are classified and from the scarcity of information about full-time equivalents. This means that any comparison of the data in this chapter with the pupil data would be misleading.

Classifications differing from the general definitions of education levels given at the end of Chapter I

Pre-primary teachers are included with first level teachers for Belgium and the Netherlands (where pre-primary and first level education are integrated).

The figures for *first level teachers* include pre-primary teachers for Belgium and the Netherlands, and second level-first stage teachers for Norway and Sweden. For the United States the figures are for teachers in elementary schools which include the pre-primary level, the first six grades and, in some cases, the seventh and eighth grades.

Teachers in the *second level-first stage* are included with those in first level education for Norway and Sweden and with those in second level-second stage general or comprehensive education for Australia, Belgium, Canada, Luxembourg and the Netherlands.

The figures for teachers in *second level-second stage* general education include those in the first stage for Australia, Belgium, Canada, Luxembourg and the Netherlands.

For Belgium, Japan, New Zealand and Norway, the figures cover both general and vocational/technical education, as they also do for Ireland, except that teachers in exclusively vocational/technical schools are not included.

Teachers in *second level-second stage vocational/technical* education are included with those in general education for Belgium, Japan, New Zealand and Norway, as well as for Ireland except for teachers in exclusively vocational/technical education.

In Finland the figures include teachers who instruct at the third level. For the United Kingdom they refer to teachers in non-advanced level public full-time and part-time further education.

Special education refers to education provided in special schools only.

Other data available, when provided by the countries

All the data are available separately for the public and the private sector.

3. STUDENTS

3.1. NEW ENTRANTS IN THIRD LEVEL EDUCATION (total full-time and part-time) in 1987-88

	LEVEL 5		LEVEL 6		TOTAL	
	Total	% women	Total	% women	Total	% women
Australia[a]	50 402	59.2	94 090	50.4	144 492	53.5
Austria	5 688	67.1	23 588	48.6	28 399	52.4
Belgium	35 447	61.7	33 243	42.7	75 089	51.0
Denmark	10 688	65.1	23 215	49.0	33 903	54.1
Finland[b]	16 831	53.2	14 484	56.0	31 612	54.3
France	120 294	49.3	169 263	60.3	289 557	55.7
Germany	100 075	56.6	192 472	40.6	292 547	46.1
Greece[c]	22 697	47.9	27 325	53.0	50 022	50.7
Ireland[d]	..	..	..	..	19 166	47.9
Italy	8 992	56.7	254 357	48.4	263 349	48.7
Japan	228 646	87.8	447 576	29.0	706 222	46.8
Netherlands	55 530	46.6	32 644	42.9	98 755	44.6
New Zealand	..	..	..	..	23 601[e]	56.6
Norway	..	..	10 591[f]	50.1	..	..
Spain	35	80.0	227 788	51.1	227 823	51.1
Sweden	67 081	56.5	18 317	51.2	84 343	55.4
Turkey	26 493	29.7	122 124	33.8	161 634	33.2
United Kingdom	146 300	47.5	165 900	45.3	312 200	46.3
Yugoslavia	20 063	48.7	80 268	48.9	100 331	48.9

a) Number of students enrolled for the first time in a given course at a given institution even if they have been enrolled previously at another institution or in another course. Excluding 759 806 new entrants (of which 49.5 per cent women) in TAFE (Technical and Further Education) which offers courses of various levels.

b) Full-time only.

c) 1986-87.

d) 1986-87. Full-time only.

e) Excluding Technical Correspondence Institutes and part-time new entrants in Polytechnics/Technical Institutes.

f) Universities and distance universities only.

3.2. PROPORTION OF THE AGE GROUP CONCERNED ENTERING THIRD LEVEL EDUCATION
New entrants per thousand persons in the corresponding age group in 1987-88

	LEVEL 5			LEVEL 6			TOTAL		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Australia[a]	147	223	184	333	354	343	480	577	527
Austria	30	63	46	192	190	191	214	247	230
Belgium	175	293	233	245	190	218	473	514	493
Denmark	93	183	137	294	300	297	387	483	434
Finland[b]	216	256	236	175	232	203	387	483	435
France	142	144	143	156	248	201	299	392	344
Germany	86	117	101	226	162	195	312	279	296
Greece[c]	148	150	149	161	200	180	309	350	328
Ireland[d]	..	..	..	..	..	..	293	282	288
Italy	8	11	9	264	255	260	272	266	269
Japan	29	216	121	332	140	237	393	356	375
Netherlands	232	211	222	146	114	130	428	359	394
New Zealand[e]	..	..	..	..	..	..	341	466	402
Norway[f]	..	..	..	152	160	156	..	..	..
Spain	0	0	0	330	364	347	330	364	347
Sweden	478	651	562	146	161	154	624	812	716
Turkey	36	16	26	155	81	119	207	106	157
United Kingdom	167	158	163	198	171	184	365	328	347
Yugoslavia	53	53	53	212	213	213	266	266	266

a) Number of students enrolled for the first time in a given course at a given institution even if they have been enrolled previously at another institution or in another course. Excluding 759 806 new entrants (of which 49.5 per cent women) in TAFE (Technical and Further Education) which offers courses of various levels.
b) Full-time only.
c) 1986-87.
d) 1986-87. Full-time only.
e) Excluding Technical Correspondence Institutes and part-time new entrants in Polytechnics/Technical Institutes.
f) Universities and distance universities only.

3.3. TOTAL ENROLMENT IN THIRD LEVEL EDUCATION (total full-time and part-time) in 1987-88

	Total	% women	% students in the private sector
Australia[a]	475 573	49.5	..
Austria	188 192	45.8	39.5[b]
Belgium	254 329	47.3	64.3
Canada	1 277 624	53.8[c]	..
Denmark	122 256	50.4	26.5
Finland[d]	139 375	50.4	..
France	1 327 771	51.2	..
Germany	1 626 334	41.3	40.6[b]
Greece[e]	197 808	49.4	0.4
Ireland[e]	73 450	43.8	2.6
Italy	1 227 809	47.2	10.0[e]
Japan	2 510 169	37.2	75.9
Netherlands	431 262	42.6	50.9
New Zealand	105 598	48.0	..
Norway	106 904	53.3	23.3[e]
Spain	1 032 074	49.9	9.2
Sweden	184 324	52.6	1.4
Turkey	534 459	33.4	0.3
United Kingdom	1 086 092	46.5	..
United States[e]	12 398 000	..	22.6
Yugoslavia	348 068	47.5	..

a) Excluding 859 336 part-time students (of which 47.2 per cent women) enrolled in TAFE (Technical and Further Education) which offers courses at various levels.
b) Non-university institutions. No private universities.
c) Universities only.
d) Full-time only.
e) 1986-87.

3.4. ENROLMENT IN THE DIFFERENT LEVELS OF THIRD LEVEL EDUCATION
(total full-time and part-time) in 1987-88

	LEVEL 5		LEVEL 6		LEVEL 7	
	Total	% women	Total	% women	Total	% women
Australia[a]	180 993	53.4	266 612	48.3	27 968	35.6
Austria	14 161	68.9	186 953	43.6	8 140	30.1
Belgium	115 085	56.5	139 244	39.8	included in 6	
Canada	338 685	52.7[b]	843 815	55.2	95 124	44.1
Denmark	27 180	70.1	95 076	44.8	included in 6	
Finland[b]	38 525	45.8	91 056	53.1	9 794	43.2
France	238 810	49.1	926 218	53.8	162 743	39.2
Germany	217 670	62.4	1 408 664	38.0	included in 6	
Greece[c]	81 839	50.5	115 969	48.7	included in 6	
Ireland[d]	18 577	42.9	35 131	48.1	2 871	39.8
Italy	30 980	56.2	1 131 599	47.7	65 230	33.8
Japan	473 556	86.4	1 957 699	26.2	78 914	14.5
Netherlands	218 142	46.3	177 572	39.1	included in 6	
New Zealand	49 358	45.2	51 732	51.1	7 643	44.1
Norway[e]	36 373	51.4	42 248	62.4	28 283	42.2
Spain	226	74.3	1 009 295	50.5	22 553	25.3
Sweden	110 423	58.4	66 340	46.2	12 945	32.5
Turkey	59 421	31.7	444 202	33.6	30 836	33.2
United Kingdom	370 393	50.8	585 781	46.0	129 818	36.2
United States[b]	3 894 000	56.4	6 231 000	51.8	2 398 000	50.0
Yugoslavia	50 829	46.7	297 239	47.6	included in 6	

a) Excluding 855 336 part-time students in Technical and Further Education (TAFE).
b) Full-time only.
c) 1986-87.
d) 1986-87. Full-time students only. Some students previously classified at level 7 have been reclassified at level 6.
e) From 1986-87 to 1987-88, there has been a change in classification in levels 5 and 6.

GENERAL DEFINITIONS

Third level education (or higher education) requires as a minimum condition of admission the successful completion of education at the second level, or evidence of the attainment of an equivalent level of knowledge, or the fulfilment of specific conditions as to age and/or working experience.

Level 5 (or short course) education covers programmes that are generally, but not invariably, dispensed outside the universities and which lead to a final qualification below that of a full first university degree.

N.B. For the United States, the two-year institutions have been assimilated here with level 5, although some of their programmes are actually similar to those given during the first two years at the four-year institutions.

Level 6 (or long course) education covers programmes leading to award of a full first university degree or an equivalent qualification that allows the student to go on to a programme at level 7.

N.B. Students in the first cycles of university studies that are part of a longer programme leading to a university first degree are classified as level 6, even if an intermediate qualification is given.

Level 7 (or postgraduate) education covers programmes that are intended for students who have completed programmes at level 6 and that lead to a postgraduate university degree or equivalent qualification. Some countries do not make a distinction between education at level 6 and education at level 7. In this case all the students have been classified as level 6 – which by definition represents the majority of students.

New entrants are students enrolling for the first time in third level education to take a programme at either level 5 or level 6. Students embarking on courses at level 7 have by definition already completed a programme at level 6 and are naturally not included.

Full-time students or new entrants: students enrolled in programmes organised in such a way that they cannot, in principle, exercise another activity even though some of them do, in practice, combine their education with another activity.

Part-time students or new entrants: students enrolled in programmes organised in such a way that they are able to undertake another activity either full-time or part-time. There are no part-time students in Austria, Denmark, France and Italy or, at levels 6 and 7, in Belgium, Germany and Switzerland; all students have been considered as full-time even through some of them will not have attended courses regularly or have had another main activity.

N.B. In some cases the total number of new entrants or students may not be the same as the sum of new entrants or students in each level, either because some of them cannot be assigned to a particular level or because the total relates to the number of persons, whereas the figure for each level refers to the number of enrolments (one student may enrol for more than one programme).

The *age of the reference population* used to calculate the percentage of an age group entering third level education is the average of the ages at which the vast majority of students complete their second level education and are therefore in a position to enrol in third level education. It is therefore only an approximate figure and does not take into account the real age spread of new entrants, and in particular the increased numbers of adult students. See *Adults in Higher Education*, OECD/CERI, Paris, 1987.

The *date of the population count* is 1st January of the academic year concerned, except for Australia and Canada (June), New Zealand (July), the United Kingdom (end August), Japan, Turkey and the United States (October), Yugoslavia (end March).

Other data available, when provided by the countries

New entrants and students by type of public or private institution (university or equivalent, distance-learning and non-university), by field of study and by level, and by age and by level. All the data are available separately for full-time and part-time new entrants and students.

4. ENROLMENT RATES

4.1. ENROLMENT RATES IN PRE-PRIMARY EDUCATION for 1987-88

	Age 2		Age 3		Age 4		Age 5		Age 6	
	Total	girls	Total	girls	Total	girls	Total	girls	Total	girls
Austria	1.0	1.1	28.5	29.2	63.4	64.3	92.3	90.6	24.1	23.1
Belgium	21.6	22.2	94.1	94.2	98.1	98.8	97.1	97.0	2.5	2.0
Canada	–	–	–	–	41.4	41.8	69.2	69.4	10.6	9.9
Denmark	–	–	–	–	–	–	–	–	96.8	96.8
Finland	20.2	..	16.0	..	19.6	..	24.3	..	48.0	..
France	35.7	36.1	96.3	96.2	101.7	101.6	99.8	99.2	1.6	1.3
Germany	9.1	9.9	32.3	34.5	71.6	70.2	86.5	86.7	79.5	76.5
Greece[a]	–	–	9.1	9.3	43.2	44.1	57.0	57.3	1.1	1.2
Ireland[a]	–	–	0.7	1.2	52.1	53.5	96.3	97.2	52.4	49.9
Japan	–	–	15.6	15.4	54.6	55.0	63.9	64.4	–	–
Netherlands	–	–	–	–	97.9	98.4	98.7	99.2	..	..
New Zealand[a]	8.8	8.8	42.6	42.8	72.8	72.6	0.6	0.6	–	–
Norway	22.8	..	31.6	..	44.1	..	52.6	..	64.2	..
Spain	4.5	4.4	17.8	18.4	90.6	92.1	102.8	104.4	–	–
Switzerland	0.6	0.6	5.4	5.3	18.7	19.2	67.1	67.3	78.1	77.6
United Kingdom	1.3	1.3	25.9	26.3	69.2	69.2	–	–	–	–
United States[a]	–	–	28.9	28.2	49.0	49.8	86.7	85.9	15.0	12.0
Yugoslavia	19.1	18.8	18.5	18.3	22.8	22.9	35.9	36.0	13.1	12.8

a) 1986–87.

4.2. ENROLMENT RATES FOR AGES 15-19 for 1987-88

		Age 15		Age 16		Age 17		Age 18		Age 19	
		Total	females	Total	females	Total	females	Total	females	Total	females
Australia[a]		90.8	91.1	91.0	90.7	74.3	72.7	50.7	45.3	41.5	37.0
of which part-time		–	–	20.8	15.5	16.6	12.2	21.7	15.6	20.4	14.9
Belgium	Total	95.8	95.8	95.5	97.1	92.7	94.1	72.0	74.2	55.5	58.6
of which part-time		2.2	2.3	3.6	3.8	4.6	4.8	4.6	5.2	5.4	6.9
Canada[b]	Total	98.3	98.8	92.4	92.5	75.7	75.4	56.9	56.9	43.3	45.0
of which part-time		–	–	–	–	0.1	0.1	0.5	0.6	0.9	1.1
Denmark	Total	97.4	97.9	90.4	92.4	76.9	78.8	68.6	67.5	53.0	48.6
France	Total	95.4	100.0	88.2	89.1	79.3	82.1	63.1	66.8	46.4	49.3
of which part-time		0.3	0.2	7.9	4.0	10.0	5.4	5.2	3.2	1.9	1.5
Germany[c]	Total	100.0	100.0	94.8	93.9	81.7	79.8	67.8	64.9	45.5	44.9
of which part-time		–	–	–	–	0.0	0.0	0.1	0.1	0.2	0.1
Greece[d]	Full-time	82.1	83.1	76.2	76.7	55.2	53.8	43.6	40.7	30.9	31.3
Ireland[d]	Full-time	95.5	100.0	83.9	88.4	66.4	73.7	39.6	44.4	24.7	25.0
Japan[e]	Total	96.6	..	91.7	..	89.3	..	3.2	..	..	..
of which part-time		2.6	..	1.9	..	1.7	..	1.4	..	..	..
Luxembourg[e]	Total	..	..	..	..	83.4	82.6	71.1	67.3	41.4	36.8
of which part-time		..	..	..	..	15.8	13.0	15.8	12.8	9.2	6.3
Netherlands[f]	Total	98.5	98.8	93.4	92.8	79.2	77.7	59.7	57.7	44.5	40.0
of which part-time		–	–	–	–	0.0	0.0	0.0	0.1	0.1	0.1
New Zealand	Total	92.5	93.0	74.3	75.6	49.3	47.6	34.7	31.6	32.2	28.4
of which part-time		0.6	0.6	2.2	1.7	6.9	4.6	11.9	7.9	14.4	9.0
Norway	Total	99.6	100.0	88.1	88.1	75.2	76.5	61.1	65.1	30.3	33.3
of which part-time		0.0	0.0	0.5	0.2	2.2	1.0	2.5	1.5	3.2	2.7
Spain[e]	Full-time	84.2	84.0	64.7	66.3	55.9	58.3	30.4	27.4	13.8	14.3
Sweden	Full-time	99.4	..	80.8	..	83.1	..	44.1	..	21.0	..
Switzerland	Total	95.1	94.2	87.8	83.5	84.6	79.0	75.0	67.1	50.7	41.6
of which part-time		5.7	4.4	38.2	31.0	56.6	46.8	53.9	43.3	35.9	25.5
Turkey[e]	Full-time	41.6	..	37.2	..	34.1	..	22.1	..	15.4	..
United Kingdom	Total	99.7	99.9	69.3	70.5	52.1	51.1	33.1	30.4	27.7	26.1
of which part-time		–	–	18.0	15.7	18.4	14.5	14.3	11.8	12.1	11.2
United States[d]	Total	98.2	97.4	94.6	94.4	89.0	89.4	60.4	56.5	49.4	49.2
of which part-time		–	–	–	–	0.4	0.5	3.1	3.0	4.4	5.6
Yugoslavia[d]	Total	..	..	..	..	66.3	64.28	72.0	72.0	69.0	73.5
of which part-time		–	–	–	–	–	–	0.6	0.8	1.7	2.4

a) Excluding the third level.
b) Excluding 117 099 part-time students in Community Colleges who cannot be distributed by age.
c) For the first time, apprenticeship has been classified as full-time education.
d) 1986-87.
e) Second level education only, no third level.
f) Excluding second level part-time education.

4.3. ENROLMENT RATES FOR AGES 20-24 for 1987-88

		Age 20		Age 21		Age 22		Age 23		Age 24	
		Total	females	Total	females	Total	females	Total	females	Total	females
Austria[a]	Full-time	13.1	13.0	13.3	12.6	12.9	11.9	12.2	11.1	11.7	10.2
Belgium	Total	48.0	49.9	29.3	30.6	22.1	21.6	16.8	16.5	12.6	12.3
of which part-time		6.4	8.1	7.2	9.0	7.5	9.0	7.7	9.3	7.2	8.3
Canada[b]	Total	31.0	33.1	26.1	26.9	20.1	19.6	15.0	14.1	11.1	10.3
of which part-time		1.5	1.7	2.2	2.5	3.0	3.4	3.4	3.9	3.2	3.6
Denmark	Total	36.8	32.8	28.8	29.7	24.9	26.6	21.7	23.4	20.2	20.9
Finland[a]	Full-time	9.6	11.2	11.9	13.2	12.1	13.1	12.4	13.4	11.9	12.2
France	Total	31.0	32.3	21.2	21.7	14.7	15.3	10.5	11.1	7.4	7.4
of which part-time		1.1	1.1	0.1	0.0	0.0	0.0	-	-	-	-
Germany[c]	Total	29.9	31.6	23.4	23.7	26.8	22.3	16.9	13.7	15.7	11.7
of which part-time		0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.0
Greece[d]	Full-time	27.3	26.5	16.6	14.9	13.1	10.4	10.8	10.0	7.2	7.4
Ireland[d]	Full-time	19.3	19.3	11.8	10.6	6.7	5.8	3.7	2.8	2.4	1.7
Luxembourg[e]	Total	19.0	14.2	7.2	5.2	5.8	5.9	0.9	1.1	0.3	0.3
of which part-time		4.0	2.4	1.5	0.9	0.6	0.6	0.9	1.1	0.3	0.3
Netherlands[f]	Total	32.4	27.4	24.6	20.2	18.7	14.8	15.1	11.8	10.7	8.3
of which part-time		0.2	0.2	0.4	0.4	0.6	0.6	0.9	0.9	1.2	1.2
New Zealand	Total	27.4	24.7	22.2	19.7	17.1	13.8	13.4	11.0	10.3	9.1
of which part-time		12.4	8.9	11.2	8.7	10.2	7.6	9.0	7.4	7.4	6.7
Norway	Total	23.4	28.2	24.3	27.0	23.2	24.3	21.3	21.6	18.0	17.1
of which part-time		2.9	2.9	2.5	2.7	2.5	2.5	2.4	2.4	2.5	2.5
Spain[e]	Full-time	10.6	10.9	6.1	7.1	3.7	3.5	1.6	1.9	..	..
Sweden	Full-time	9.1	11.1	11.3	13.4	12.1	12.8	12.0	11.9	10.9	10.2
Switzerland[e]	Total	22.5	20.6	9.4	10.0	5.2	5.4	3.5	3.3	1.8	1.4
of which part-time		15.5	12.6	6.5	6.4	3.5	3.4	2.4	2.0	1.8	1.4
Turkey[e]	Full-time	11.0	5.0	8.3	4.2	6.9	3.3	4.0	2.4	2.9	1.7
United Kingdom[g]	Total	24.2	24.0	5.3	5.6	4.8	5.3	4.0	4.4	3.4	3.8
of which part-time		9.9	10.5	4.7	5.0	4.4	4.8	3.8	4.2	3.4	3.8
United States[d]	Total	35.7	34.3	29.8	30.0	24.7	23.6	16.2	15.3	13.1	12.2
of which part-time		3.8	3.8	5.1	6.0	5.6	5.8	5.5	5.9	5.5	5.4
Yugoslavia[d]	Total	47.3	47.8	18.1	15.8	12.8	10.9	10.1	7.0	6.4	4.2
of which part-time		2.0	2.1	2.2	2.1	2.4	2.1	2.4	2.0	2.2	1.7

a) Third level only.
b) Excluding 117 099 part-time students in Community Colleges who cannot be distributed by age.
c) For the first time, apprenticeship has been classified as full-time education.
d) 1986-87.
e) Second level education only.
f) Excluding second level part-time education.
g) Second level only except for the 20 year-olds.

107

5. QUALIFICATIONS

5.1. QUALIFICATIONS IN SECOND LEVEL-FIRST STAGE EDUCATION, in 1987

	Total	% girls
Austria	91 605	49.3
Belgium	117 099	49.6
Denmark	14 464	44.2
Finland	61 147	49.3
France	513 339	..
Germany[a]	760 013	48.7
Greece	123 128	49.6
Ireland	59 263	..
Italy	819 304	49.1
Japan	2 005 245	48.8
Netherlands	162 512	46.0
Norway[b]	65 357	49.0
Spain	509 091	50.8
Turkey	380 205	38.2
Yugoslavia	319 570	..

a) 1986.
b) Number of pupils sitting the exam.

5.2. QUALIFICATIONS IN SECOND LEVEL-SECOND STAGE EDUCATION, in 1987

	QUALIFICATIONS ALLOWING ACCESS TO THIRD LEVEL EDUCATION				OTHER QUALIFICATION	
	General or comprehensive		Vocation/technical			
	Total	% women	Total	% women	Total	% women
Australia[d]	142 107	52.4	..	..	..	..
Austria	17 082	53.4	14 887	46.7	24 834	35.3
Belgium	42 279	54.3	30 561	49.8	18 048	54.4
Denmark	18 710	62.6	37 017[e]	62.9	21 420	23.7
Finland	31 117	61.4	–	–	52 276	57.3
France	185 582	..	100 290	..	406 301	47.7
Germany[c]	284 972	47.3	..	..	..	..
Greece	77 088	56.9	..	..	32 671	28.4
Ireland[d]	51 159	..	..	..	–	–
Italy	104 204	..	268 159	..	..	..
Japan	1 206 511	51.2	448 174	47.4	–	–
Luxembourg	638	55.5	..	..	2 078	..
Netherlands	76 010	51.5	56 091[c]	51.9	–	–
New Zealand	19 654	..	–	–	..	..
Spain	167 463	54.4	64 904	50.4	97 597	51.2
Sweden	26 462[b]	66.9	63 856[b]	41.4	..	..
Turkey	230 586[b]	39.1	105 551[b]	30.3	..	..
United Kingdom[e]	260 466	52.0	68 985	39.8	450 471	48.4
United States[c]	2 683 000	..	..	..	..	..
Yugoslavia	21 564	58.1	233 058[b]	43.8	..	..

a) Estimates. Excluding Technical and Further Education (TAFE).
b) Including those awarded qualifications not allowing access to third level education.
c) 1986.
d) Total number of pupils who take the exam. All of them get a certificate showing the grades obtained in each subject.
e) School-leavers with at least 5 A-C awards at General Certificate of Education (GCE) O-level or equivalent (classified as "general") or a BTEC (Business and Technical Education Council) ordinary certificate and diploma (classified as "vocational/technical") are considered as eligible for third level education. School-leavers with less than 5 A-C awards at GCE are classified as "other".

5.3. PROPORTION OF THE AGE GROUP CONCERNED OBTAINING A SECOND LEVEL QUALIFICATION ALLOWING ACCESS TO THIRD LEVEL EDUCATION

Number qualifying per thousand persons in the corresponding age group, in 1987

	Age group	General or comprehensive	Technical/vocational	Total
Australia[a]	17	519	–	519
Austria	18-19	138	121	259
Belgium	18-19	296	214	510
Denmark	19-20	239	473[b]	713
Finland	19-20	436	–	436
France	18-19	221	119	340
Germany[c]	19-20	284	–	284
Greece[c]	17-18	485	–	485
Italy	19-20	111	246	357
Japan	17-18	640	238	878
Luxembourg	19-20	120	–	–
Netherlands	18-19	303	222[b]	527
New Zealand	18-19	335	–	335
Spain	18-19	255[b]	99	353
Sweden	19-20	222	535[b]	757
Turkey	18-19	212[b]	94[b]	306
United Kingdom[d]	18-19	290	77	366
United States[c]	18-19	746	–	746
Yugoslavia	19-20	57	602[c]	659

a) Estimates. Excluding Technical and Further Education (TAFE).

b) Including those awarded qualifications not allowing access to third level education.

c) 1986.

d) School-leavers with at least 5 A-C awards at General Certificate of Education (GCE) O-level or equivalent (classified as "general") or a BTEC (Business and Technical Education Council) ordinary certificate and diploma (classified as "vocational/technical") are considered as eligible for third level education. School-leavers with less than 5 A-C awards at GCE are classified as "other".

5.4. QUALIFICATIONS IN THIRD LEVEL EDUCATION, in 1987

	LEVEL 5		LEVEL 6		LEVEL 7	
	Total	% women	Total	% women	Total	% women
Australia[a]	27 375	59.2	47 031	49.6	4 144	32.3
Austria	3 701	66.3	9 608	39.7	742	21.8
Belgium	28 020	58.9	23 519	40.1	included in 6	
Canada	59 057	56.7	120 062	54.0	20 033	43.8
Denmark	8 302	63.4	10 729	41.6	included in 6	
Finland	12 640	52.7	9 434	56.2	842	26.8
France	128 730	54.3	137 690	49.0	50 944	40.6
Germany	85 047	63.3	138 805	38.0	16 035	26.3
Greece	7 732	56.2	16 303	51.1	591	32.5
Ireland[b]	4 641	..	9 616	..	1 073	..
Italy	5 393	58.3	74 085	47.6	15 943	32.9
Japan	175 970	87.5	385 092	26.0	25 037	12.1
Netherlands	38 308	50.0	20 545	34.6	included in 6	
New Zealand[c]	2 571	57.1	6 561	46.7	2 666	35.9
Norway[d]	21 283	55.3	14 620	65.0	4 650	32.4
Spain[e]	42 590	63.5	63 497	52.5	3 474	25.9
Sweden	24 688	53.0	14 566	53.3	1 200	21.8
Turkey	17 685	35.4	52 878	34.4	5 264	34.8
United Kingdom	125 349	53.9	143 110	44.7	46 592	35.2
United States[f]	466 279	53.9	968 203	51.7	395 518	45.9
Yugoslavia	21 155	51.5	27 364	48.2	2 982	30.2

a) Excluding Technical and Further Education (TAFE).

b) 1986. The number of institutions covered has increased from year to year so that the data are not comparable with previous figures. In addition, post-graduate diplomas have been reclassified from level 7 to level 6.

c) Universities and teacher training colleges only.

d) The relatively high number of qualifications obtained derives from the frequency with which Norwegian students gain several qualifications during the same year. Some reclassification of qualifications appears to have occurred between levels 5 and 6.

e) The "diplomas" obtained after three years of study have been reclassified from level 6 to level 5.

f) 1986.

5.5. PROPORTION OF THE AGE GROUP CONCERNED OBTAINING A THIRD LEVEL QUALIFICATION

Number qualifying per thousand persons in the corresponding age group, in 1987

	LEVEL 5		LEVEL 6		LEVEL 7	
	Age group	Number	Age group	Number	Age group	Number
Australia[a]	19	104	21	182	23	15
Austria	20-21	29	22-23	72	24-25	6
Belgium	20-21	184	22-23	146	included in 6	
Canada	20-21	146	22-23	263	24-25	43
Denmark	21-22	95	23-24	129	included in 6	
Finland	21-22	172	23-24	124	25-26	11
France	20-21	152	22-23	159	24-25	60
Germany	21-22	81	23-24	128	25-26	15
Greece	19-20	53	21-22	117	23-24	4
Ireland[b]	19-20	75	21-22	170	23-24	20
Italy	21-22	6	23-24	76	24-25	17
Japan	20-21	107	22-23	223	24-25	16
Netherlands	20-21	155	22-23	80	included in 6	
New Zealand[c]	20-21	47	22-23	124	24-25	49
Norway[d]	21-22	317	23-24	224	25-26	74
Spain[e]	20-21	64	22-23	96	24-25	5
Turkey	20-21	17	22-23	53	24-25	6
United Kingdom	20-21	134	22-23	148	24-25	49
United States[f]	20-21	127	22-23	241	24-25	97
Yugoslavia	21-22	57	23-24	75	25-26	8

a) Excluding Technical and Further Education (TAFE).

b) 1986. The number of institutions covered has increased from year to year so that the data are not comparable with previous figures. In addition, post-graduate diplomas have been reclassified from level 7 to level 6.

c) Universities and teacher training colleges only.

d) The relatively high number of qualifications obtained derives from the frequency with which Norwegian students gain several qualifications during the same year. Some reclassification of qualifications appears to have occurred between levels 5 and 6.

e) The "diplomas" obtained after three years of study have been reclassified from level 6 to level 5.

f) 1986.

GENERAL DEFINITIONS

For the definition of the different levels of education, see the end of Chapters 1 and 3.

The reference year for enrolments is the academic year, spanning two calendar years (e.g. 1986-87), except in Australia and New Zealand. For qualifications, however, the reference year is the year in which they are awarded (usually at the end of the academic year). For example, 1986 refers to those qualifying at the end of the 1985-86 academic year.

The age of the reference population used to calculate the percentage of an age group obtaining a second level-second stage qualification allowing access to third level education is the average of the ages at which the vast majority of students complete their second level education and are therefore in a position to enrol in third level education.

To calculate the percentage of an age group obtaining a third level qualification, *two years for level 5, four years for level 6 and six years for level 7* have been added to the ages taken for reference in order to obtain for each level an average age. The percentages are therefore only approximate figures and do not take into account the real age spread of those obtaining qualifications.

The *date of the population count* is 1st January of the academic year concerned, except for Australia and Canada (June), New Zealand (July), the United Kingdom (end August), the United States, Japan and Turkey (October), Yugoslavia (end March).

Qualifications awarded at the end of a first cycle of university studies, which is in principle only one stage in the process of obtaining a full university first degree, are classified as level 5 and not as level 6.

Note that for France, the *maîtrises* which can be prepared for either directly in four years of study at university level or in one year following the *licence* are, like the *licence*, included in level 6.

N.B. Some countries make no distinction between level 6 and level 7 qualifications; all qualifications have been classified at level 6 which, by definition, represents the majority.

6. EXPENDITURE

6.1. TOTAL EXPENDITURE ON EDUCATION (by sources)

Expenditure[a] in 1987 (in local currency and at current prices)

	Public sources (millions)	Private sources (millions)	PERCENTAGE OF GDP		
			Public sources	Private sources	Total
Australia[b]	13 788.0	985.0	5.25	0.38	5.63
Austria	87 274.0	..	5.91	..	..
Belgium[c]	272 447.2	..	5.12	..	..
Canada	35 601.1	3 208.2	6.53	0.59	7.12
Denmark	52 175.0	474.0	7.50	0.07	7.57
Finland	20 778.6	1 925.5	5.31	0.49	5.80
France[b]	281 274.0	51 853.0	5.57	1.03	6.59
Germany	85 082.0	3 364.0	4.24	0.17	4.41
Greece[b]	147 975.6	11 258.6	2.70	0.21	2.91
Ireland[b]	1 092.1	51.4	5.84	0.28	6.12
Italy[b]	44 480 430.0	..	4.96	..	..
Japan[b]	16 429 280.0	4 838 473.0	4.98	1.41	6.38
Luxembourg[c]	9 247.5	..	4.09	..	..
Netherlands	30 150.0	1 466.0	6.99	0.34	7.33
New Zealand	3 179.3	..	5.37	..	..
Norway	38 372.0	970.0	6.82	0.17	6.99
Portugal	220 241.7	..	4.26	..	..
Sweden	73 428.4	..	7.19	..	..
Switzerland	12 754.3	252.0	5.01	0.10	5.11
Turkey	928 604.0	..	1.59	..	1.59
United Kingdom	20 707.2	..	4.97	..	..
United States[b]	199 372.0	70 113.0	4.77	1.68	6.44
Yugoslavia	1 837 658.0	..	3.55	..	..

a/ Including transactions relating to loans for Austria, Denmark, Germany, Greece, Ireland, Japan, the Netherlands, Norway, Sweden, Switzerland, the United States and Yugoslavia.
b/ 1986.
c/ Ministry(ies) of Education only.

6.2. PUBLIC EXPENDITURE ON EDUCATION (including subsidies)

Public expenditure[a] on education in 1987 (in local currency and at current prices)

	Current expenditure (millions)	Capital expenditure (millions)	Total (millions)	Total public expenditure as % of GDP	Total as % of total public expenditure
Australia[b]	12 583.0	1 204.0	13 787.0	38.7	13.6
Austria	79 115.0	7 616.0	87 274.0	52.8	11.2
Belgium[c]	270 317.1	2 132.1	272 447.2	52.5	9.8
Canada	36 226.7	2 582.7	38 809.4	45.5	15.6
Denmark	50 028.0	2 033.0	52 761.0	57.6	13.2
Finland	21 219.4	1 484.9	22 704.3	42.2	13.7
France[b]	266 489.0	16 762.0	283 251.0	51.6	10.9
Germany[d]	79 906.0	6 690.0	88 445.0	46.9	9.4
Greece[b]	139 668.4	8 245.7	147 975.6	35.7	7.6
Ireland[b]	992.0	99.5	1 092.1	55.1	10.6
Italy[b]	40 498 630.0	3981 800.0	44 480 430.0	50.9	9.7
Japan[e]	10 930 232.0	2 052 326.1	13 980 622.0	33.1	12.8
Luxembourg	9 225.0	22.5	9 247.5	51.7[c]	6.5[c]
New Zealand	2 912.1	267.2	3 179.3	..	..
Netherlands	28 013.0	1 785.0	31 616.0	60.7	12.1
Norway	34 426.0	2 397.0	39 342.0	50.0	14.0
Portugal	194 775.7	25 466.0	220 241.7	43.9[d]	9.4[d]
Sweden	66 180.4	2 927.6	73 428.4	59.0	12.2
Switzerland	11 555.3	1 174.6	12 754.3	34.5	14.5
Turkey	771 400.0	157 204.0	928 604.0	..	..
United Kingdom	19 898.7	808.5	20 707.2	43.5	11.5
United States[b]	182 875.0	13 811.0	199 372.0	37.0	12.9
Yugoslavia	1 853 572.0	113 795.8	2 021 245.0	..	..

a) Including transactions relating to loans for Austria, Denmark, Germany, Greece, Ireland, Japan, the Netherlands, Norway, Sweden, Switzerland, the United States and Yugoslavia.
b) 1986.
c) Expenditure of the Ministry(ies) of Education only.
d) Public and private expenditure.
e) 1986. Public and private expenditure for regular public education.

6.3. PUBLIC CURRENT EXPENDITURE ON PUBLIC EDUCATION[a], BY PURPOSE

Percent breakdown for 1987

	Administration	Emoluments		School books	Scholarships	Welfare services	Other	Non-distributed
		Total	*of which* teaching staff					
		In percentage of identified items only					In percentage of all items	
Austria	16.6	77.5	60.1	1.4	3.3	1.2	15.6	..
Belgium[b]	1.4	98.4	98.4	..	..	0.2	16.7	..
Canada[c]	2.9	78.3	58.2	8.4	5.5	5.0	14.4	..
Denmark	2.6	59.0	..	25.3	11.0	2.1	4.9	..
Finland	2.9	73.9	54.9	8.0	5.4	9.9	12.7	..
France[d]	1.0	93.7	..	2.7	2.6	..	10.6	..
Germany[c]	0.3	95.1	..	..	1.4	3.2	15.7	..
Greece[d]	..	98.6	89.7	..	0.3	1.6	6.1	..
Ireland[d]	1.2	91.3	87.6	0.4	2.2	4.9	18.9	..
Italy[d]	..	91.0	..	..	0.2	8.8	12.5	..
Luxembourg[d]	1.2	94.3	83.7	1.6	2.4	0.5	2.2	..
New Zealand	0.1	70.0	59.7	22.0	5.7	2.3	4.5	7.5
Netherlands[b]	1.7	76.2	74.3	6.2	14.7	1.2	13.7	..
Norway	4.0	82.2	..	8.2	5.6	..	16.6	..
Portugal	2.4	93.4	..	..	..	4.2	7.1	..
Sweden	5.1	71.5	..	4.7	7.2	11.6	14.5	22.0
Switzerland	..	93.2	76.4	4.5	2.4	..	14.5	..
Turkey	0.2	95.3	89.9	0.6	1.0	2.9	5.8	0.7
United Kingdom	2.3	83.6	61.8	4.4	7.2	2.4	13.0	2.5
Yugoslavia	..	76.8	..	9.0	2.0	12.2	20.8	..

a) The table excludes Australia and Japan due to the limited number of items for which they report their data. From those items which they have supplied for 1986, they indicate that 5.9 per cent of total current public spending is on "scholarships" and 2.4 per cent on "welfare services" in Australia while Japan devoted 65.4 per cent of the total (public and private) expenditure for public schools and universities to "emoluments" and 52.2 per cent of the same total specifically to emoluments for teaching staff.

b) The data refer to public expenditure on public and private education.

c) Public and private expenditure.

d) 1986.

GENERAL DEFINITIONS

Total expenditure includes current and capital expenditure on both public and private education by both public and private sources, but excludes foreign aid given or received.

Public expenditure is expenditure funded by public authorities at all levels. *Private expenditure* is expenditure funded by private sources.

Expenditure by the Ministry or Ministries of Education which is not directly related to education (e.g. culture, sport, youth activities, etc.) is, in principle, not included. On the other hand, any expenditure on education by other Ministries (e.g. Health, Agriculture, Labour, Tourism, etc.) is included.

Scholarships are included in the expenditure by the authorities (public or private) that granted them and not in the expenditure of the households that received them. The same applies to all other forms of transfer.

Current expenditure relates to educational goods and services whose lifespan should not in theory exceed the current year (emoluments of personnel, educational supplies, scholarships, minor repairs and maintenance, administration, etc.). Such expenditure has to be renewed in order to provide the same goods and services in the following year.

Capital expenditure relates to assets that will be used for several years (construction of buildings, major repairs, major items of equipment, vehicles, etc.), although the financing of these assets is reported in one single financial year.

Administration: All administrative expenditure with the exception of emoluments of personnel.

Personnel: Emoluments of administrative staff, teaching staff and other categories of staff.

School books: Expenditure directly related to instructional activities, i.e. school books, textbooks, exercise books and other and teaching supplies.

Scholarships: Scholarships and other forms of financial assistance (with the exception of loans) granted to students for study within the country or abroad.

Welfare services: school meals and boarding expenses, school transport, medical services, etc.

Other current expenditure: expenditure for the maintenance and operation of buildings (water, electricity, heating, minor repairs, cleaning, etc.) plus expenditure not included elsewhere.

The figures refer to the *accounting period* beginning during the year specified.

Gross Domestic Product (GDP) is the sum of final expenditure on goods and services in purchasers' values, less the c.i.f. value (cost insurance freight) of imports. The figures for GDP are taken from the *National Accounts* published regularly by the OECD.

Total public expenditure covers the expenditure (education, health, defence, agriculture, transport and communications, etc.) made at all administrative levels but does not include transfers received. The figures have been taken from the *Economic Outlook* published regularly by the OECD.

N.B. The figures quoted in Sections 6.1 and 6.2 are derived from different tables in the questionnaire and do not correspond for all countries, mainly because Table 6.2 includes some expenditure which cannot be broken down between public and private education. However, the figures quoted in Sections 6.2 and 6.3 are derived from the same tables.

Other data available, when provided by the countries

Breakdown of total, current and capital expenditure by main public and private sources. Amount of aid received for education and that given to foreign countries.

Breakdown of public expenditure by purpose and by level and type of public and private education (though comparable breakdowns for private expenditure are rarely provided).

ANNEX TO PART B

	COMPULSORY EDUCATION			SCHOOL YEAR	
	Age limit		Duration	Start	End
	Min.	Max. [a]		year n	year n+1
Australia	6	15 [b]	9	January	December (year n)
Austria [c]	6	15(17)	9(11)	September	June
Belgium	6	16(18)	10(12)	September	June
Canada	6/7	15/16	9	September	June
Denmark	6/7	16/17	9	August	June
Finland	7	17	10	August	May
France	6	16	10	September	June
Germany	6	16(18)	10(12)	August	July
Greece	5½	14½	9	September	June
Iceland	..	..	..	..	..
Ireland	6	15	9	September	August
Italy	6	14	8	September	June
Japan	6	15	9	April	March
Luxembourg	6	15	9	September	July
Netherlands	5	16	11	August	July
New Zealand	6	15	9	February	December (year n)
Norway	7	16	9	August	June
Portugal	6	14	8	October	June
Spain	6	14(16)	8(10)	September	June
Sweden	7	16	9	August	June
Switzerland [d]	6/7	15/16	8/9	August/September	June/July
Turkey	7	15	8	September	May
United Kingdom	5	16	11	September	July
United States	6	17	11	September	May
Yugoslavia	7	15	8	September	June

a) The figures in brackets include compulsory part-time education (or, in the case of Spain, first level vocational education) for those not enrolled in full-time education.

b) 16 in Tasmania.

c) The duration of compulsory schooling for girls in the Province of Vorarlberg is 11 years. Young people working in farming but not apprenticed are required to attend a technical school part-time up to age 18.

d) Variable according to canton.

Remarks: *Independently of the age at which it is set, the legal end of compulsory education varies according to country. Only the general rules are described below:* i) *a pupil may leave school on the day of his and her birthday in most provinces of Australia and Canada, France, New Zealand and Turkey, and also in the United States and Switzerland though the regulations vary from one state or canton to another;* ii) *pupils must complete the current school year or term in some provinces of Australia and Canada, in Austria, Belgium (for part-time compulsory education), Ireland, Japan, Luxembourg, the Netherlands, Sweden and the United Kingdom;* iii) *pupils are required to have completed the statutory number of years of compulsory education in Belgium (for full-time education), Denmark, Finland, Sweden, Norway and also in Spain, where pupils who have been unable to do so must take vocational training, and in Yugoslavia, where such pupils must complete their education in evening classes.*

DIAGRAMS OF EDUCATION SYSTEMS

General Observations

These diagrams give an outline of the structure of the regular education systems in OECD Member countries. Only the most common types of education, internal flows and outflows are indicated. Similarly, neither the inflows of adults into third level education, which vary in magnitude from country to country, nor the types of education specially designed for them are shown.

In the case of federal countries, only the more commonly used types of structure are included.

The size of the boxes is in no way proportional to the number of pupils/students concerned.

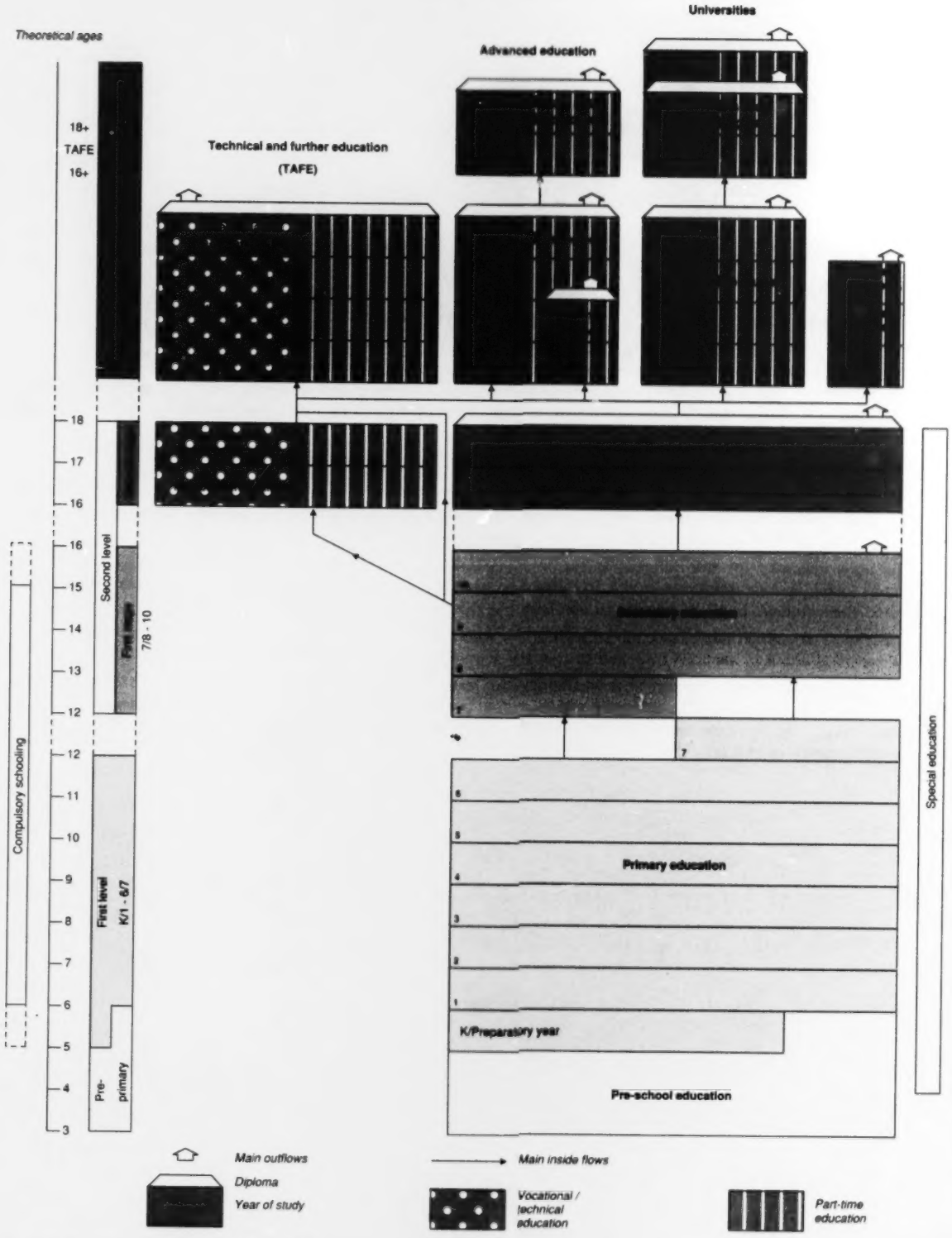
The duration indicated for a particular type of education is that which applies in the majority of cases: it may differ for certain fields of study, particularly in third level or part-time education.

The ages indicated for the different levels of education apply to pupils/students whose passage through the system has followed the normal pattern, i.e. to those who have neither been kept back nor moved up, and who have not interrupted their studies, particularly prior to enrolment in third level education.

Pre-primary education has been coupled with primary education although, depending on the country concerned, it may be provided either in sections attached to primary schools, in separate establishments, or in both.

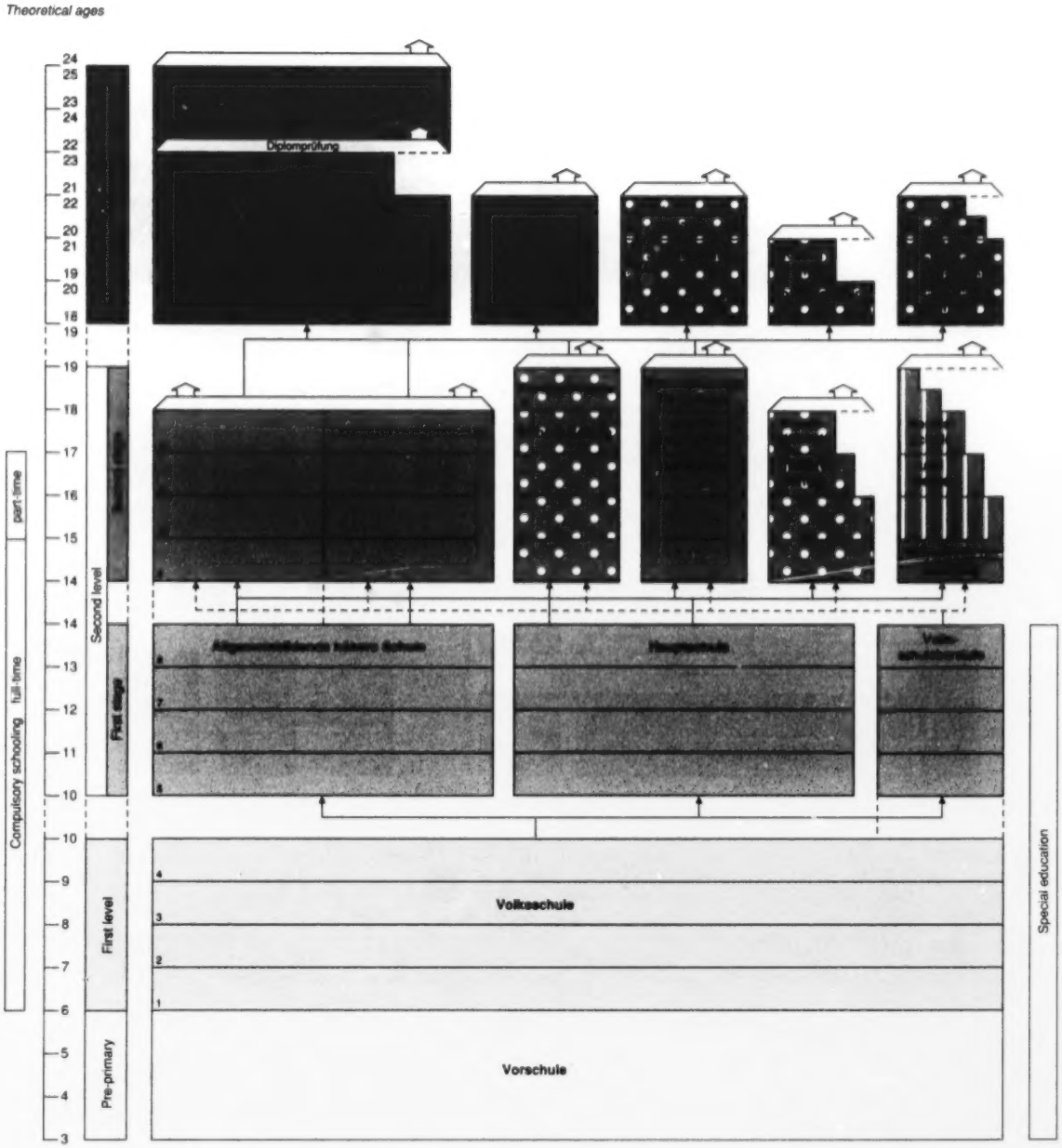
Apprenticeships – as well as part-time vocational education in the German-speaking countries – are in fact full-time training courses leading to a full qualification which can, in some countries, also be obtained at the end of a full-time course of study. They have, however, been classified as part-time education because only part of this training takes place in an ordinary or specialised educational institution.

AUSTRALIA

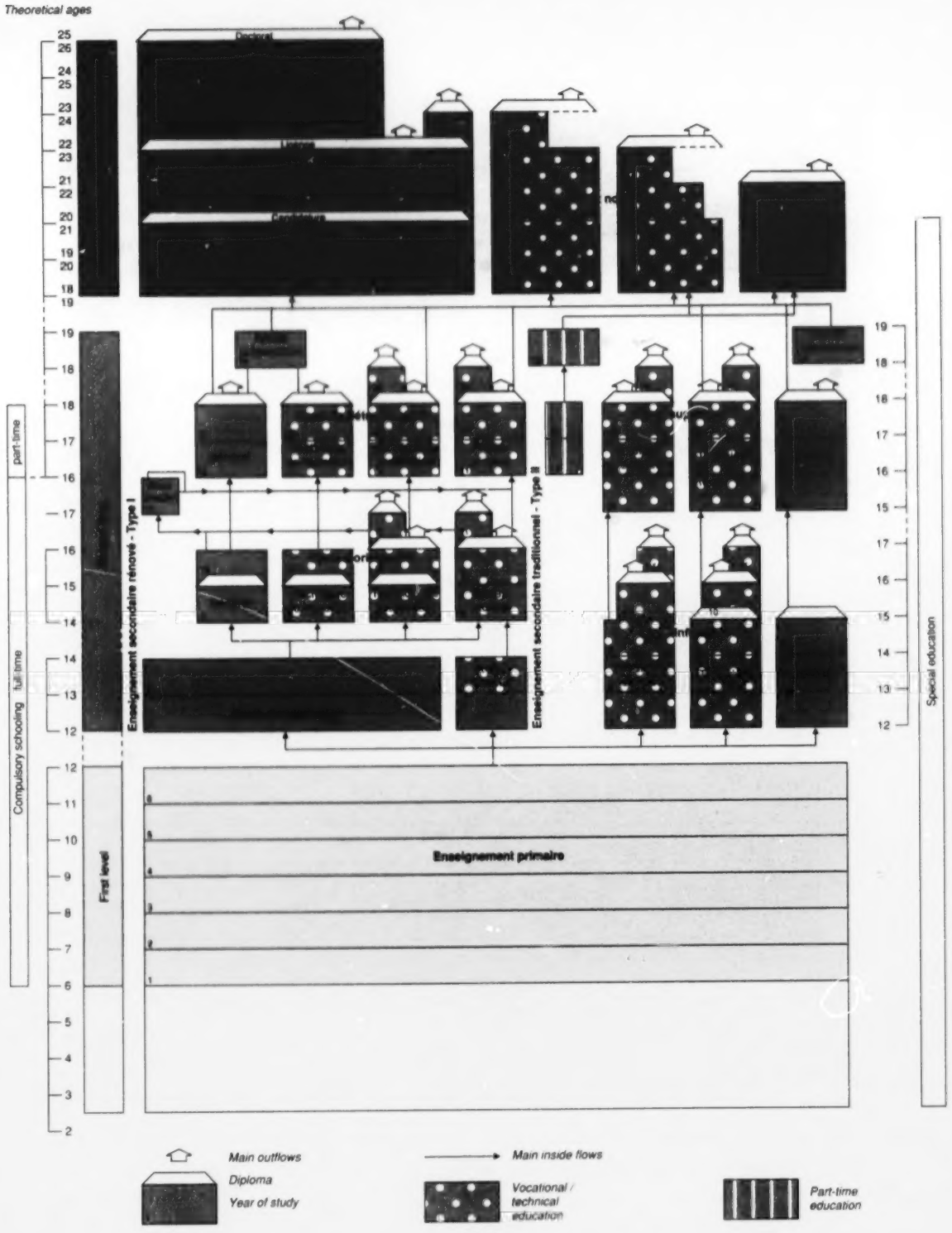


1. Separate secondary colleges in Tasmania and ACT (Government system).

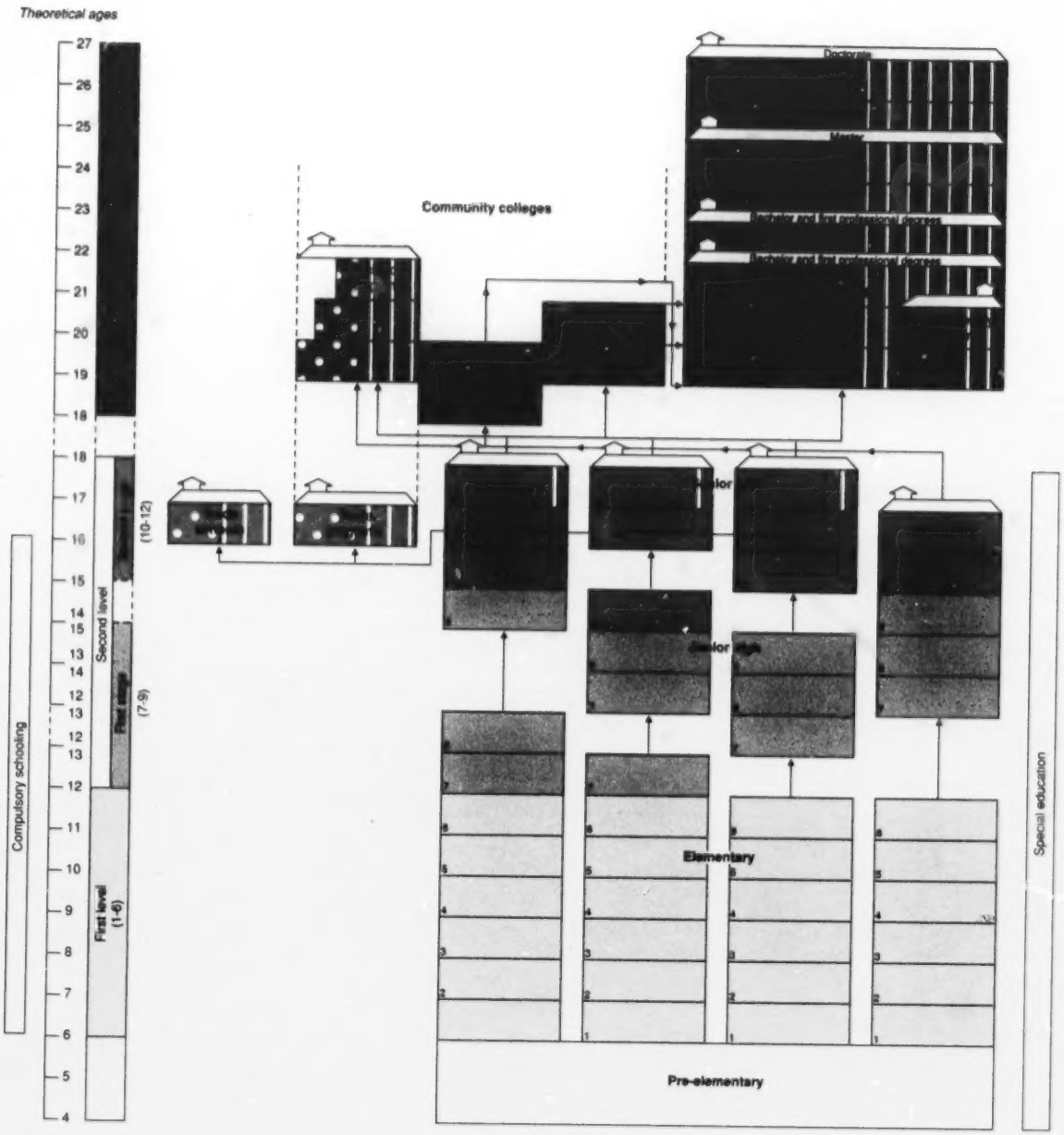
AUSTRIA


Theoretical ages
24
25
23
24
22
23
21
22
20
21
19
20
18
19
Diplomprüfung
Compulsory schooling
full-time
part-time
Second level
First stage
Second stage
Allgemeinbildende höhere Schule
Hauptschule
Volksschule
Special education
First level
Pre-primary
Volksschule
Vorschule
Main outflows
Main inside flows
Diploma
Year of study
Vocational / technical education
Part-time education

BELGIUM


Theoretical ages
Compulsory schooling
full-time
part-time
First level
Enseignement secondaire rénové - Type I
Enseignement secondaire traditionnel - Type II
Enseignement primaire
Special education
Main outflows
Diploma
Year of study
Main inside flows
Vocational / technical education
Part-time education

CANADA


Theoretical ages
27
26
25
24
23
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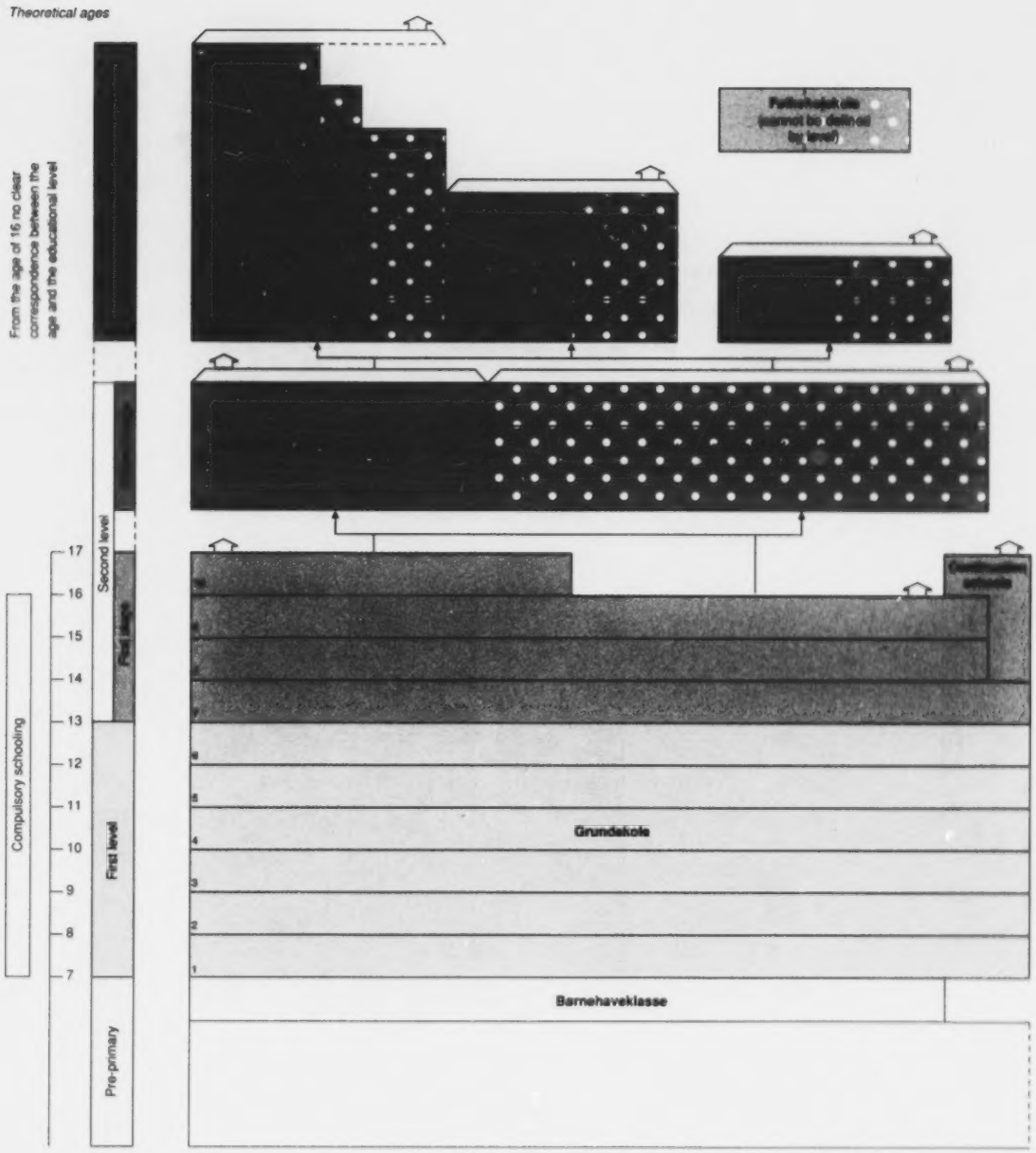
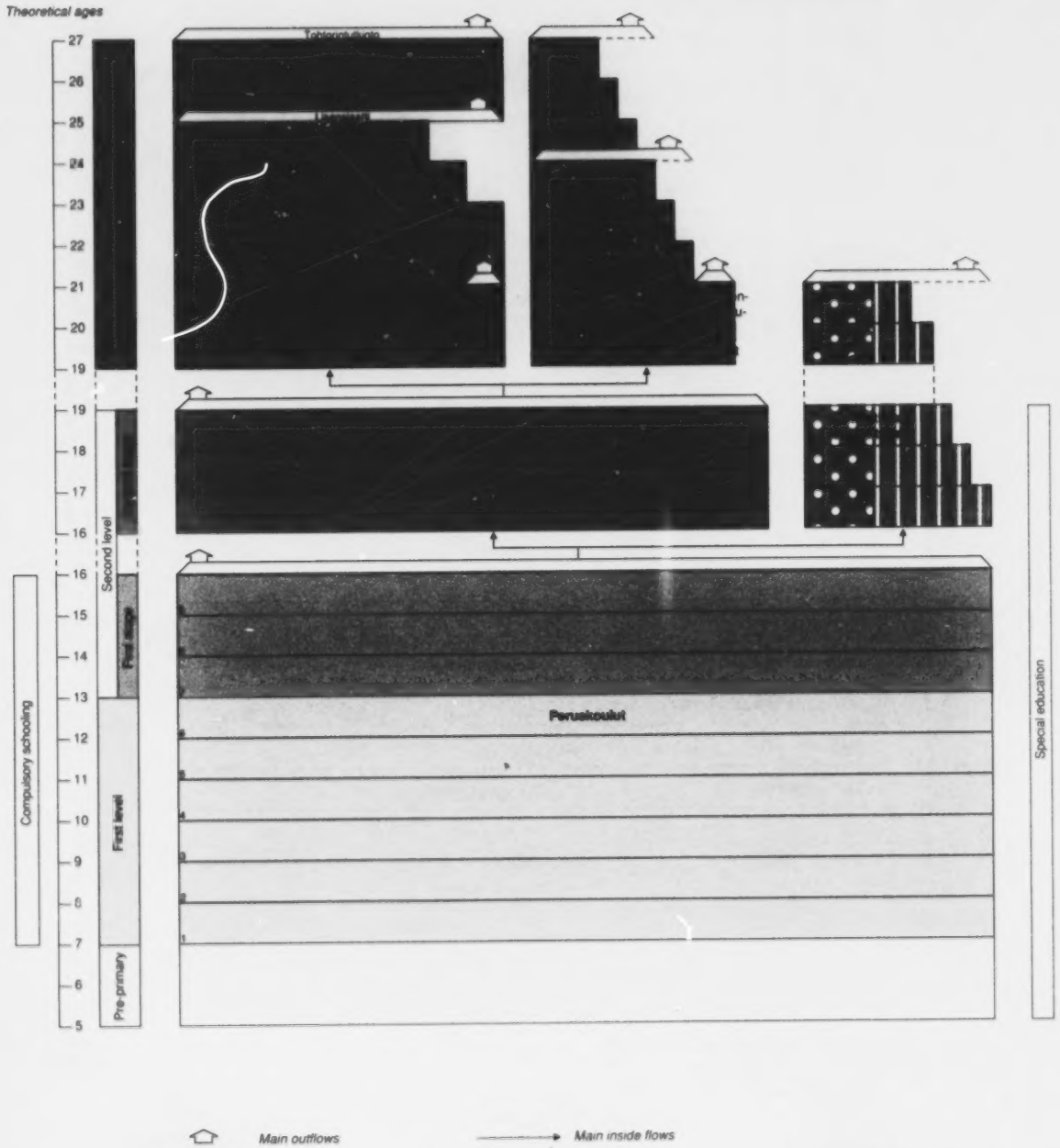
20
19
18
18
17
16
15
14
15
13
14
12
13
12
13
12
11
10
9
8
7
6
5
4
Compulsory schooling
First level (1-6)
Second level
(10-12)
(7-9)
Community colleges
Doctorate
Elementary
Pre-elementary
Special education
Main outflows
Diploma
Year of study
Main inside flows
Vocational / technical education
Part-time education

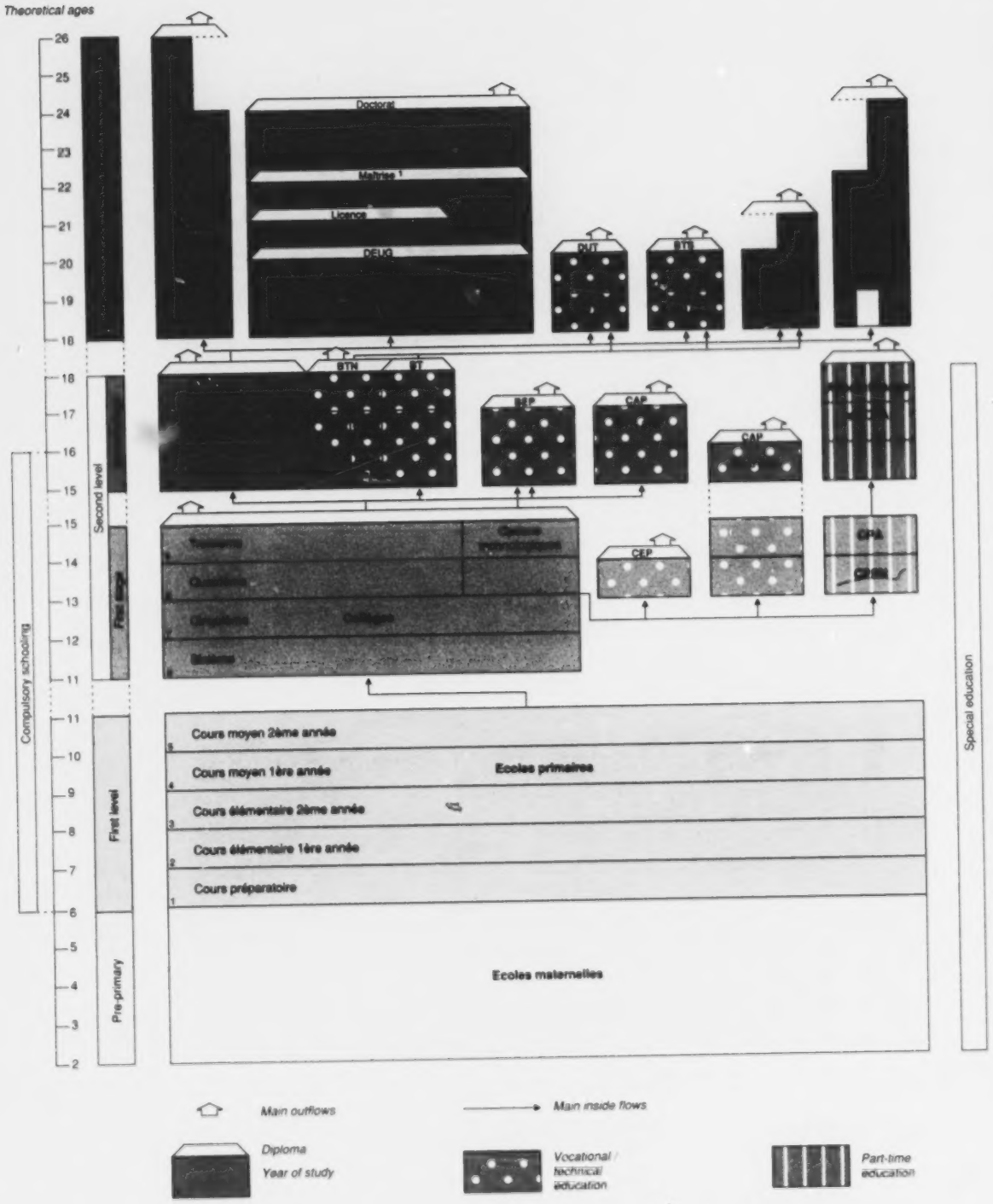
DENMARK


Theoretical ages
From the age of 16 no clear correspondence between the age and the educational level
Compulsory schooling
17
16
15
14
13
12
11
10
9
8
7
Second level
First level
Pre-primary
Grundskole
Børnehaveklasse
Main outflows
Diploma
Year of study
Main inside flows
Vocational / technical education
Part-time education

FINLAND

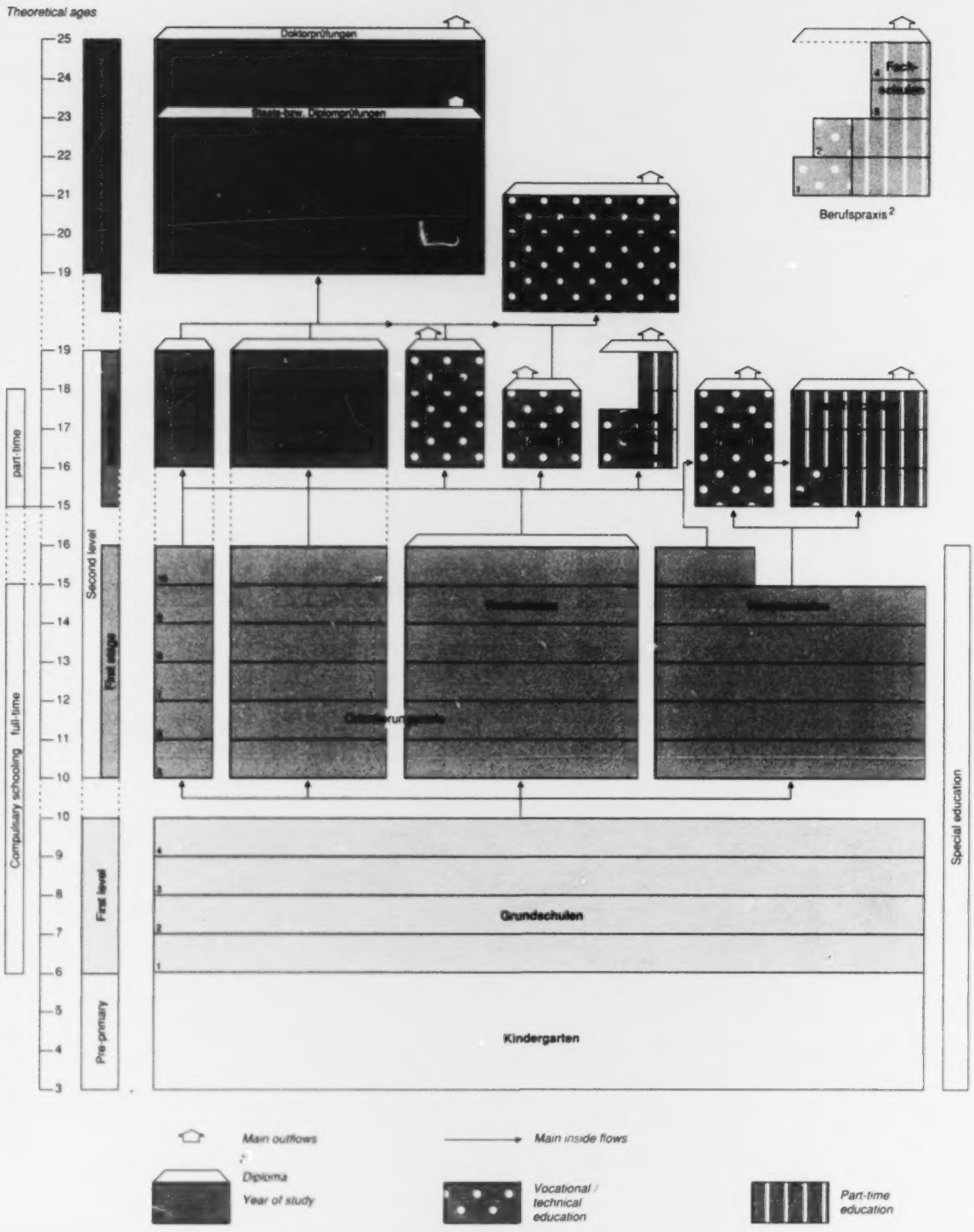

Theoretical ages
27
26
25
24
23
22
21
20
19
19
18
17
16
16
15
14
13
12
11
10
9
8
7
6
5
Second level
First stage
First level
Pre-primary
Compulsory schooling
Peruskoulut
Special education
Main outflows
Diploma
Year of study
Main inside flows
Vocational / technical education
Part-time education

FRANCE



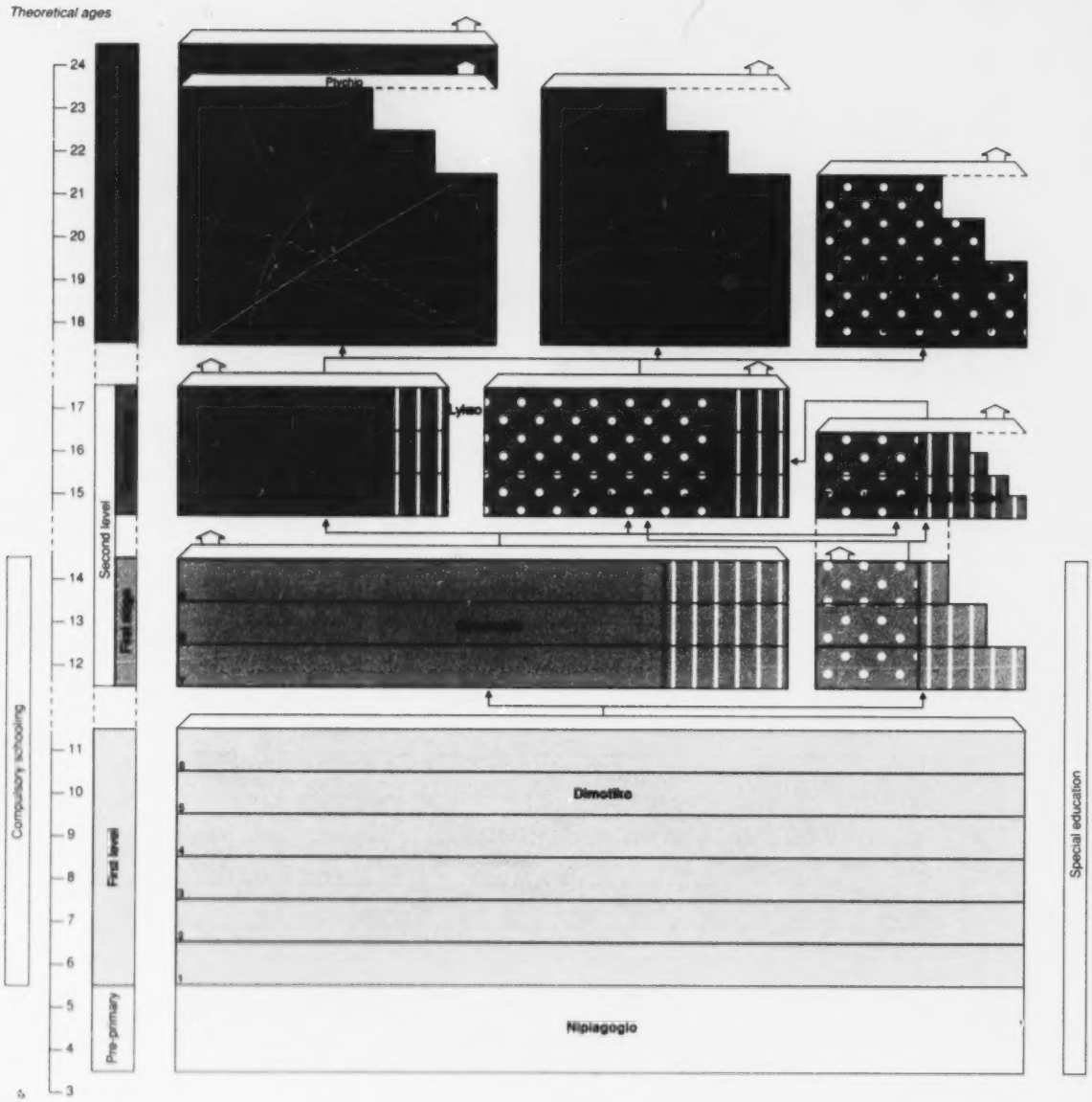
1. The master degree can be obtained either directly on the basis of 4 years of study or after one additional year for the students already holding the "licence". For international comparisons, it is classified as a first degree (level 6).

GERMANY

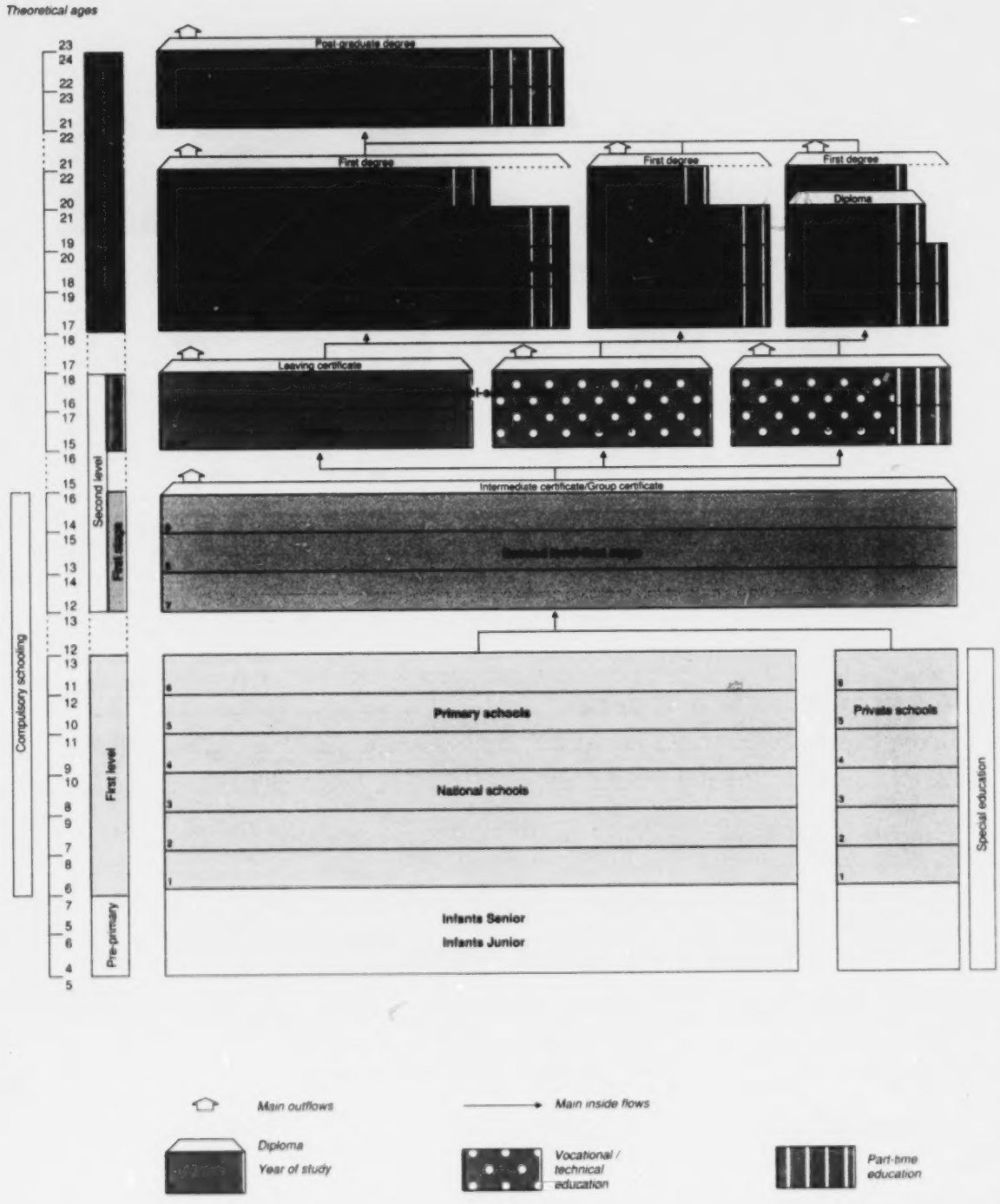


1. Basic vocational training year.
2. Work experience required

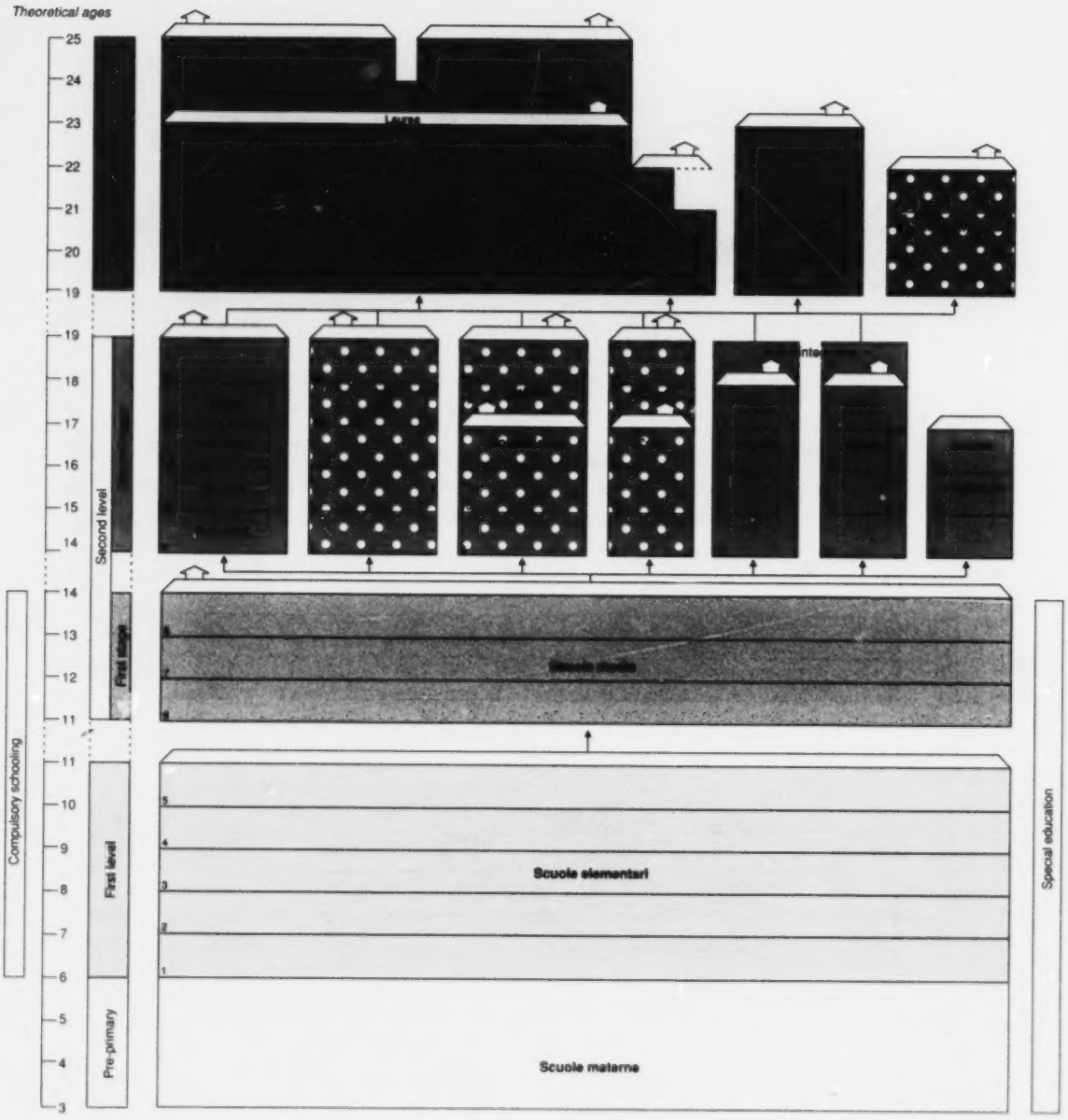
GREECE


Theoretical ages
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
Second level
Final stage
Final level
Pre-primary
Compulsory schooling
Special education
Lykeio
Gymnasio
Dimotiko
Nipiagogio
Main outflows
Diploma
Year of study
Main inside flows
Vocational / technical education
Part-time education

IRELAND


Theoretical ages
Post-graduate degree
First degree
First degree
First degree
Diploma
Leaving certificate
Intermediate certificate/Group certificate
Primary schools
National schools
Infants Senior
Infants Junior
Private schools
Special education
Second level
First stage
First level
Pre-primary
Compulsory schooling
Main outflows
Main inside flows
Diploma
Year of study
Vocational / technical education
Part-time education

ITALY



Main outflows

Main inside flows

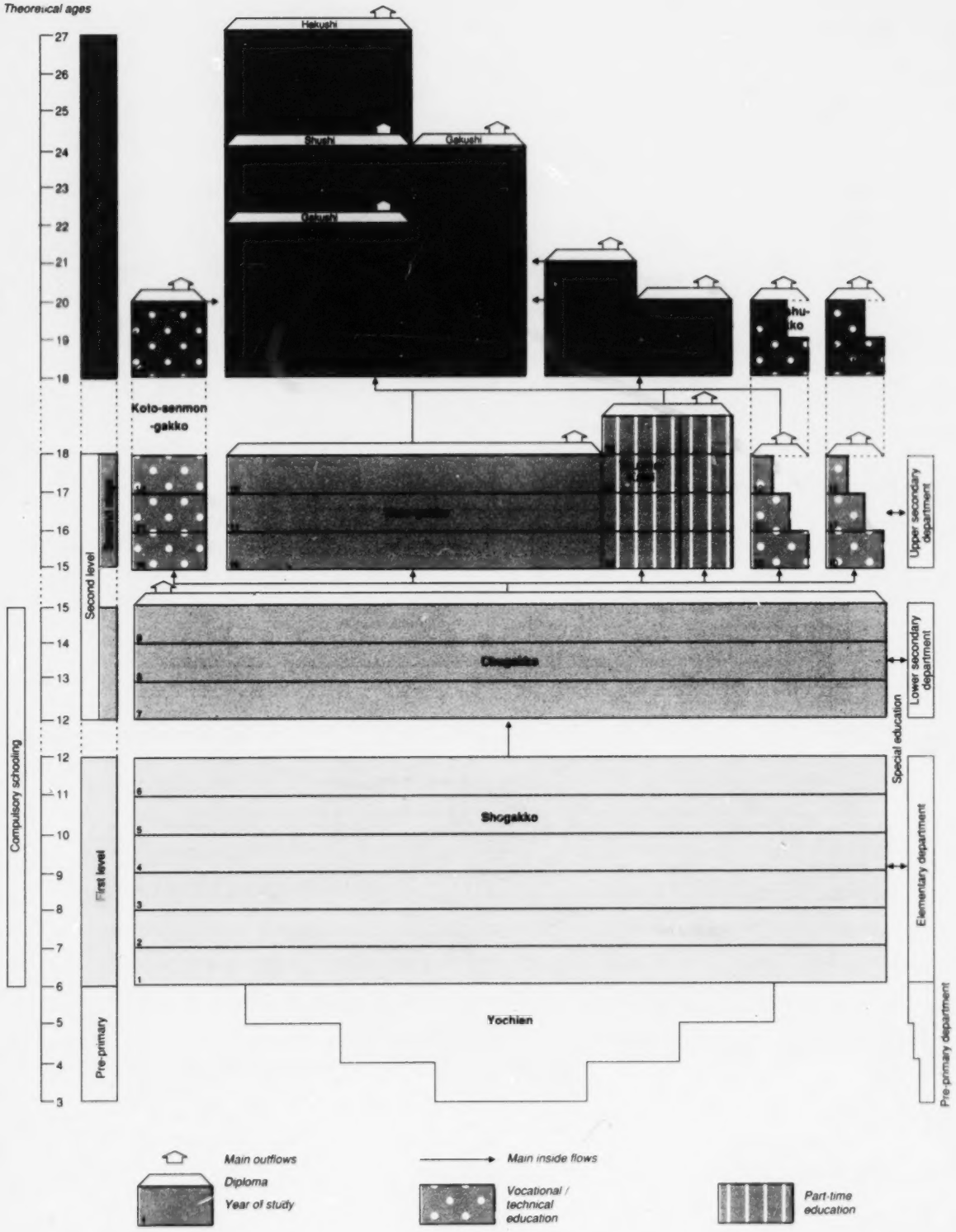
Diploma

Year of study

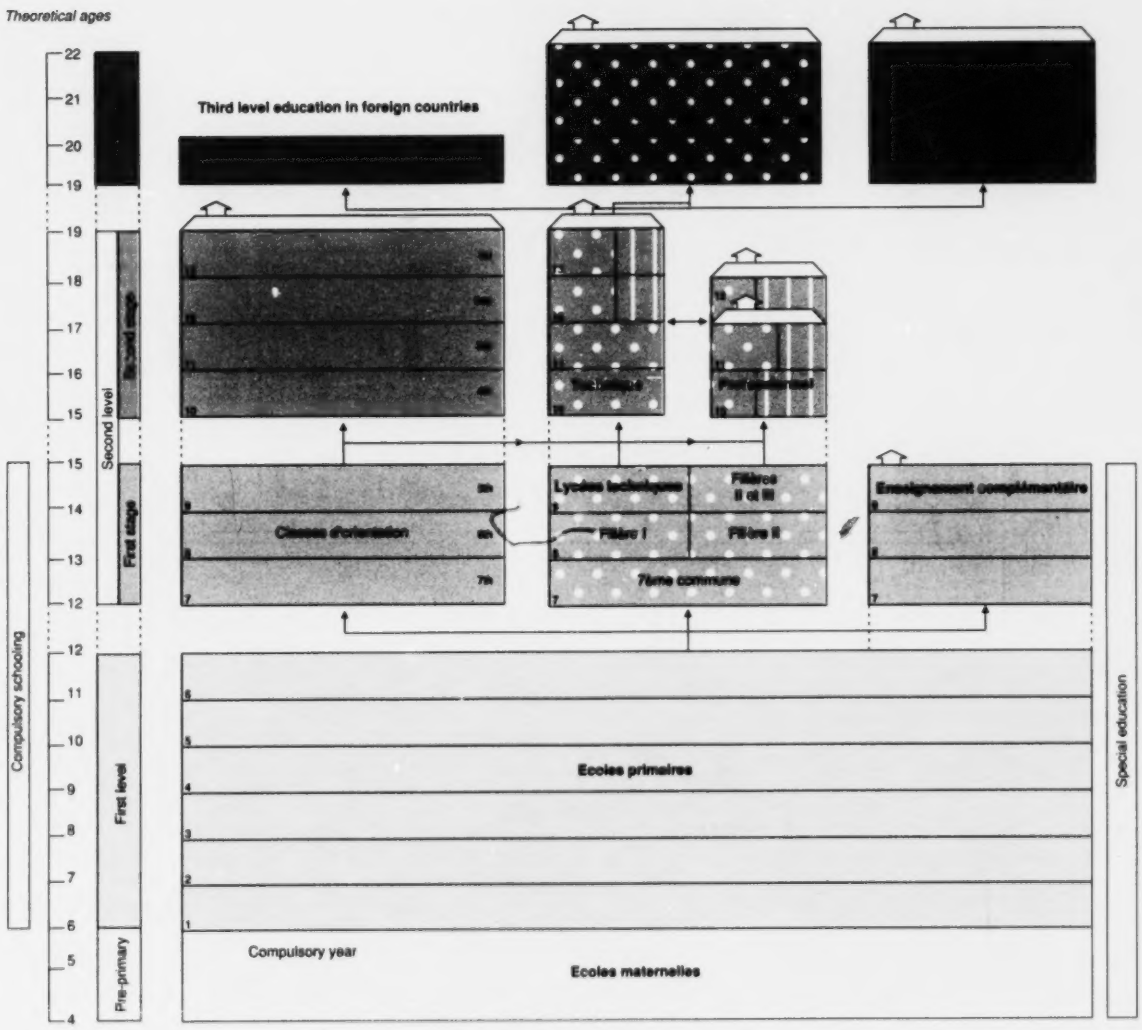
Vocational / technical education

Part-time education

JAPAN

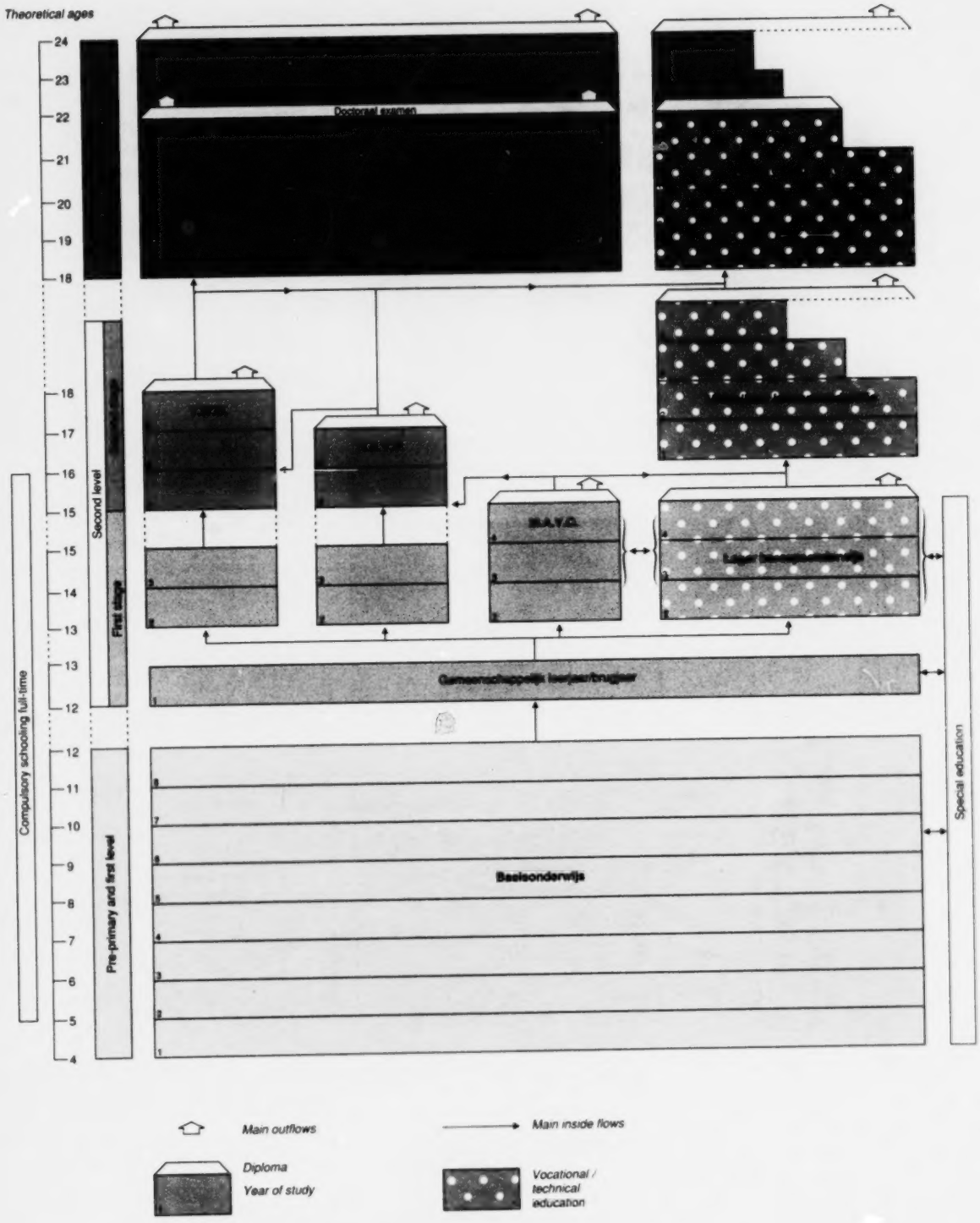

Theoretical ages
27
26
25
24
23
22
21
20
19
18
Hakushi
Shushi
Gakushi
Koto-senmon -gakko
18
17
16
15
Second level
15
14
13
12
Chugakko
9
8
7
Upper secondary department
Lower secondary department
Special education
Compulsory schooling
12
11
10
9
8
7
6
5
4
3
First level
Pre-primary
Shogakko
6
5
4
3
2
1
Yochien
Elementary department
Pre-primary department
Main outflows
Diploma
Year of study
Main inside flows
Vocational / technical education
Part-time education

LUXEMBOURG


Theoretical ages
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
Third level education in foreign countries
Second level
First stage
Second stage
Classes d'orientation
Lycées techniques
Filière I
Filière II
Filières II et III
7ème commune
Enseignement complémentaire
First level
Pre-primary
Ecoles primaires
Ecoles maternelles
Compulsory year
Compulsory schooling
Special education
Main outflows
Diploma
Year of study
Main inside flows
Vocational / technical education
Part-time education

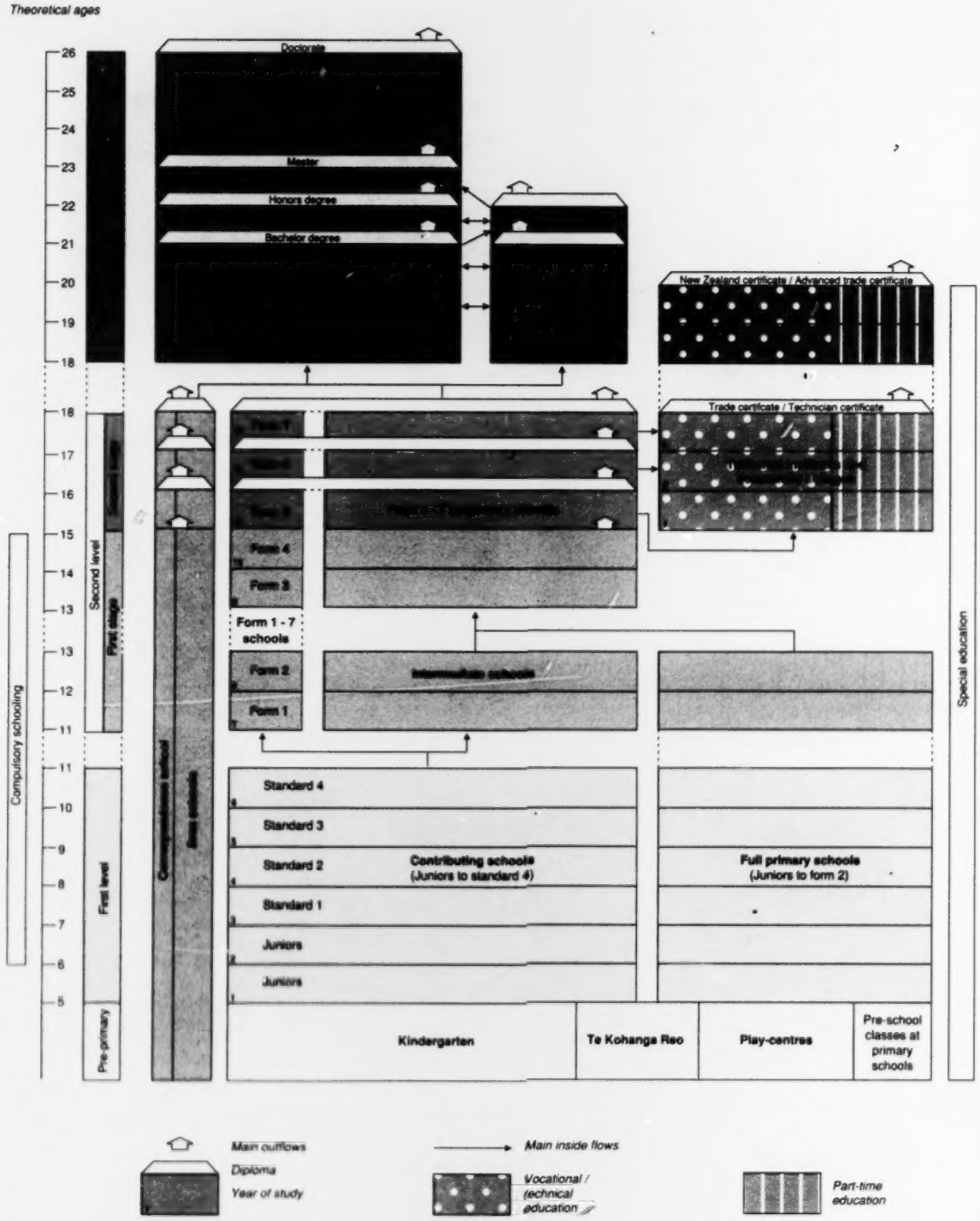
THE NETHERLANDS

Full-time education only



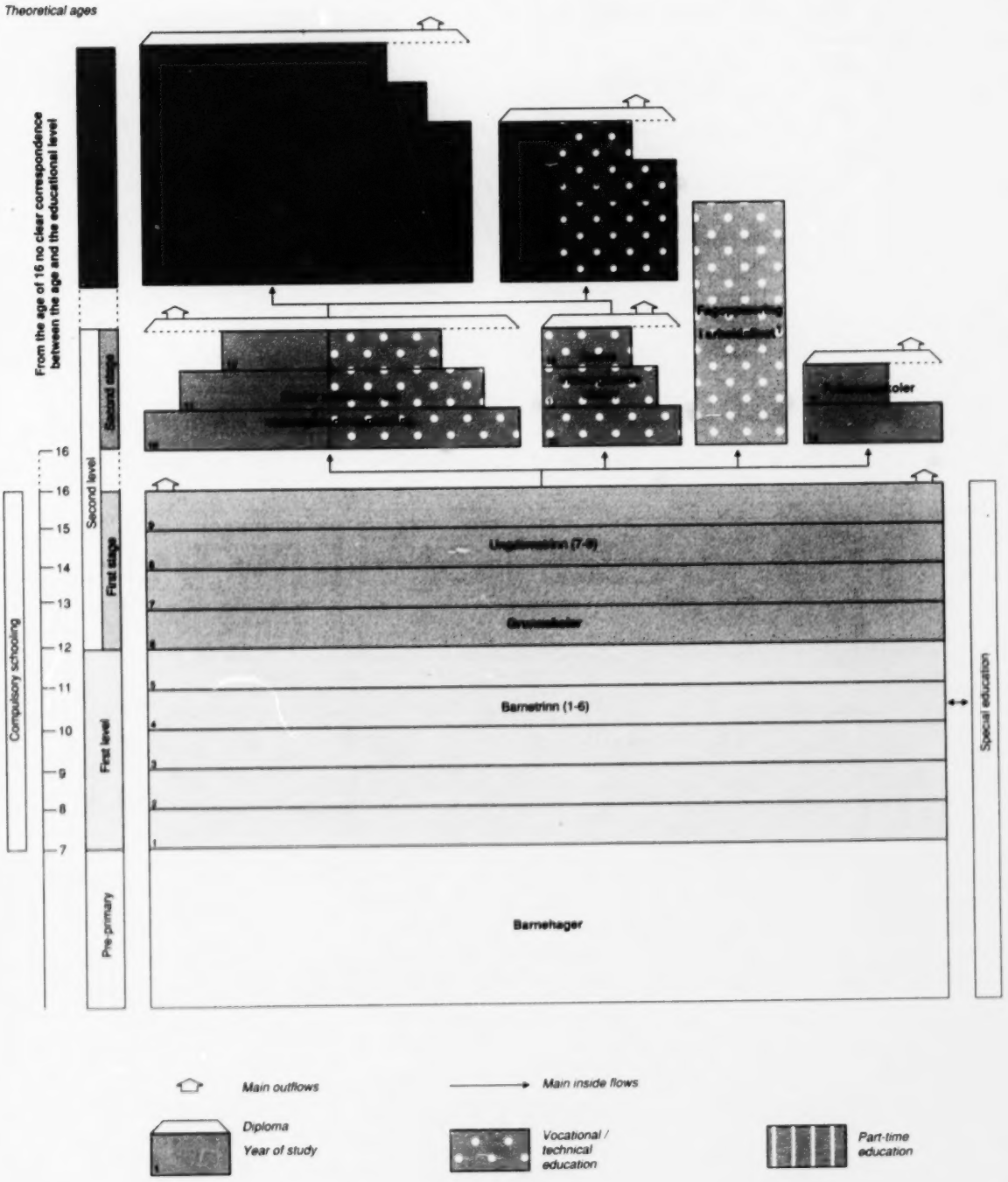
Note : Full-time compulsory schooling is followed by one year of part-time compulsory schooling.

NEW ZEALAND



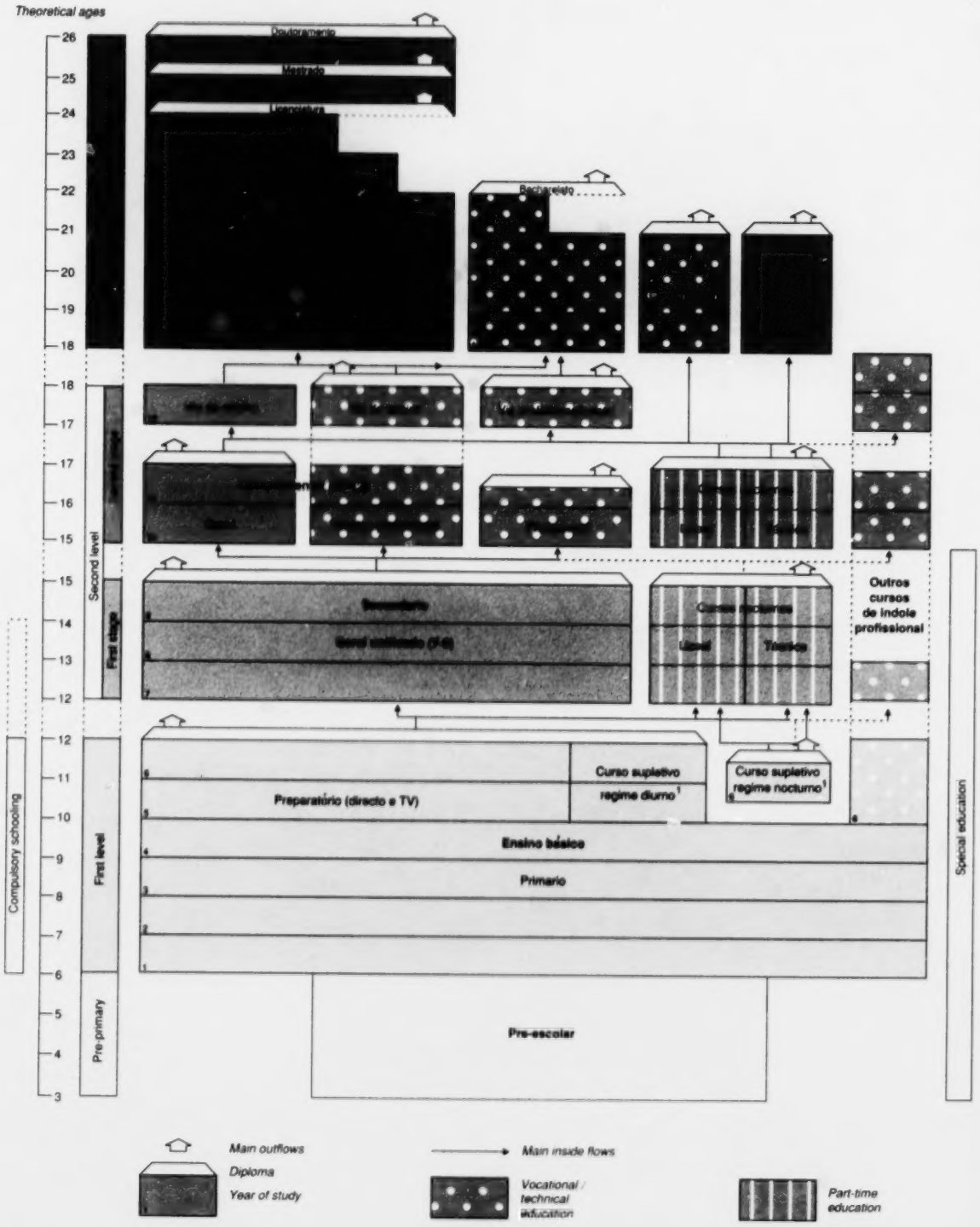
Note : Although compulsory schooling begins at 6, 100% of all five-year-olds are enrolled in primary school.

NORWAY



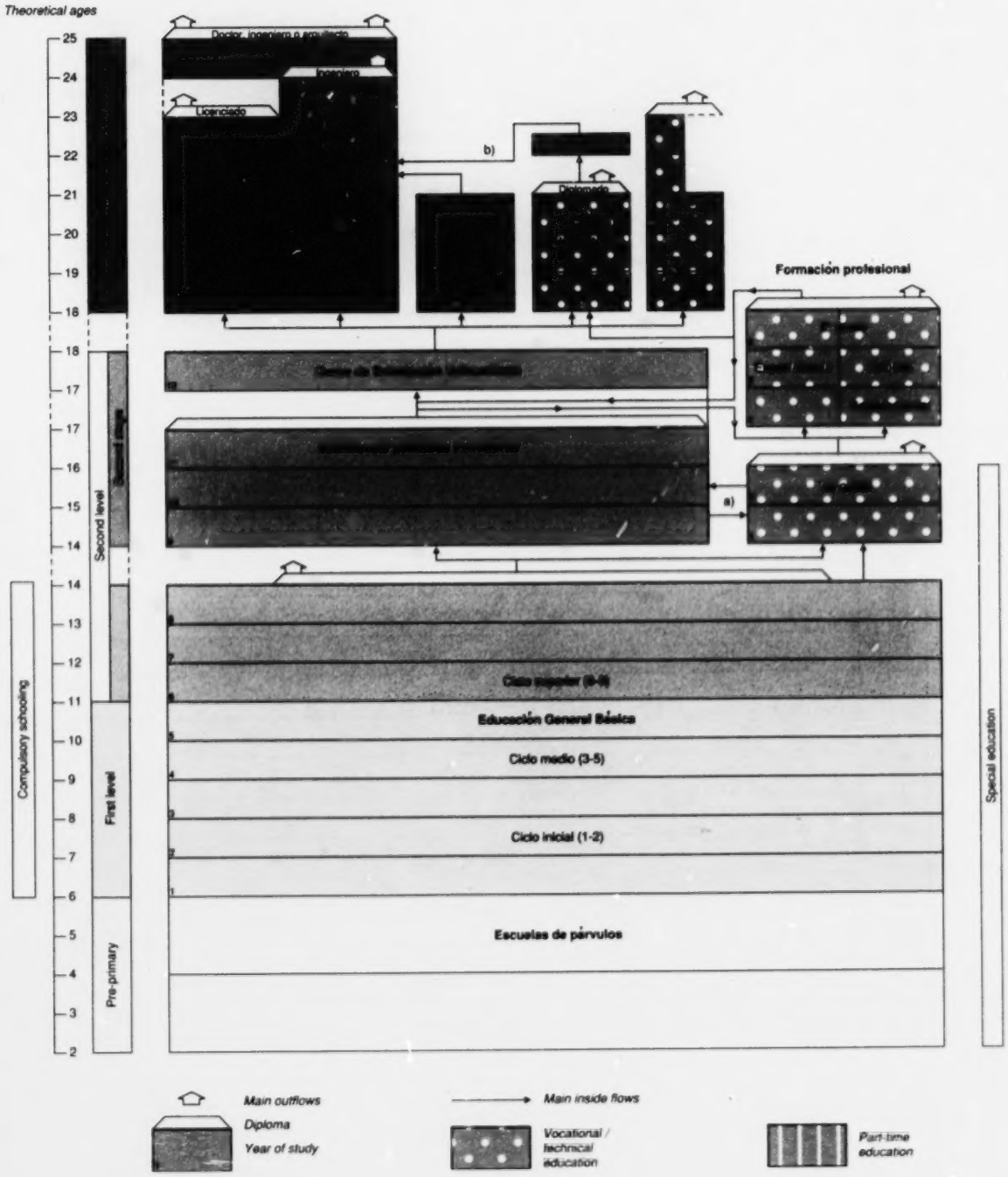
1. Systematic training in the world of work (i. e. apprenticeship 3 - 5 years).

PORTUGAL



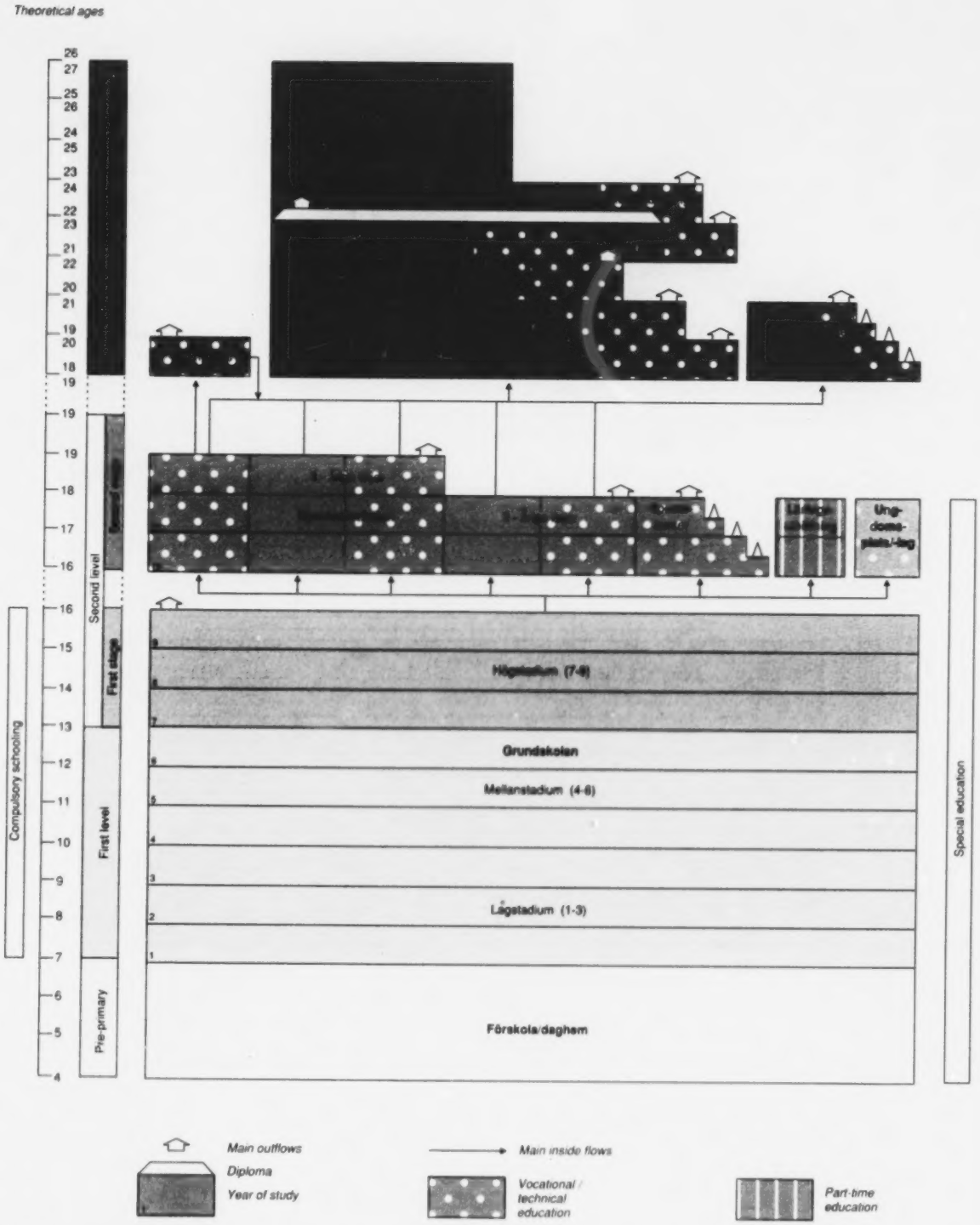
1. For young people 14-18 years old to complete basic education. Day courses for those not working and evening courses for workers.

SPAIN



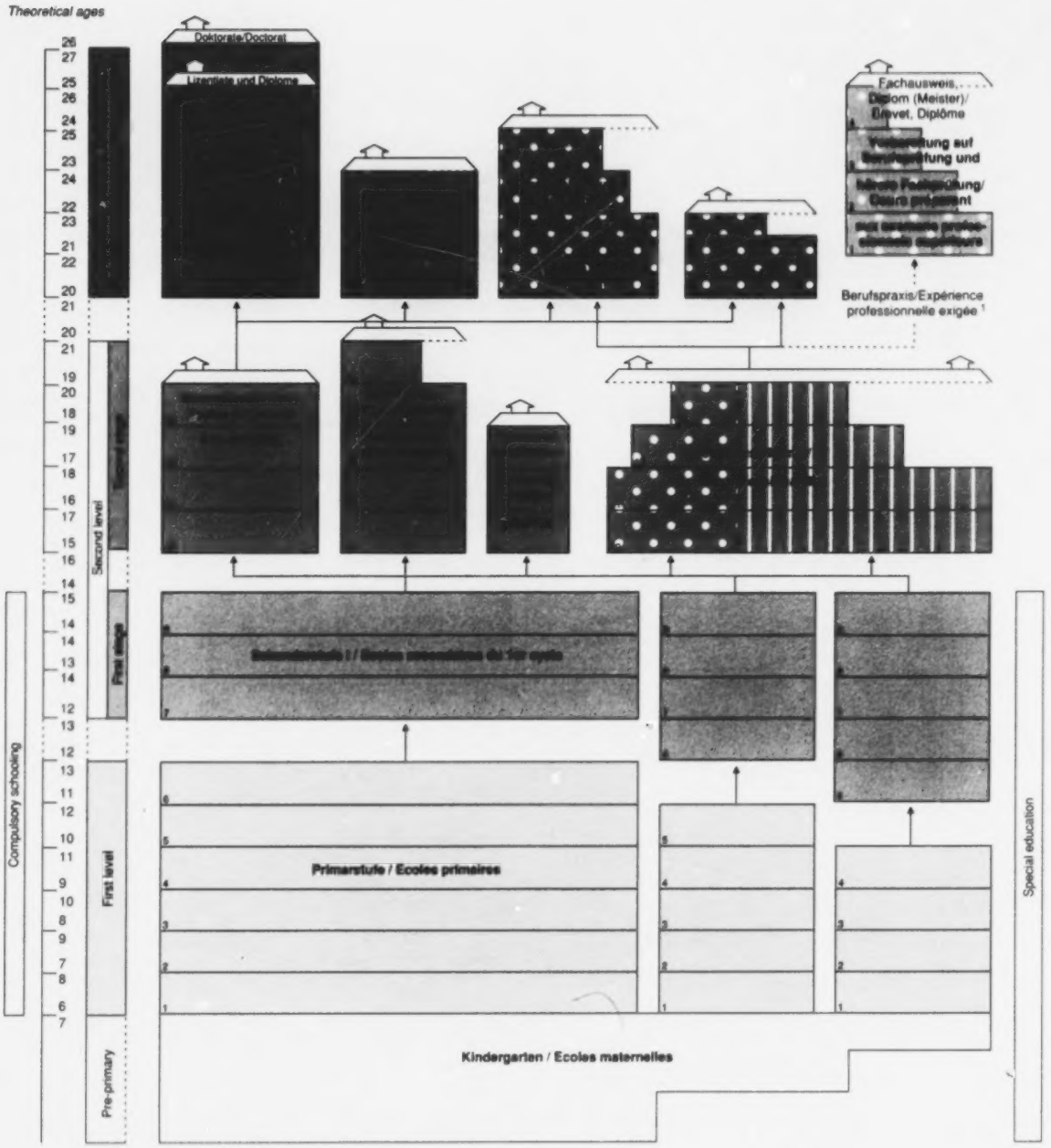
a) Transfer possible with partial recognition of preceding programmes.
b) For specific programmes.

SWEDEN



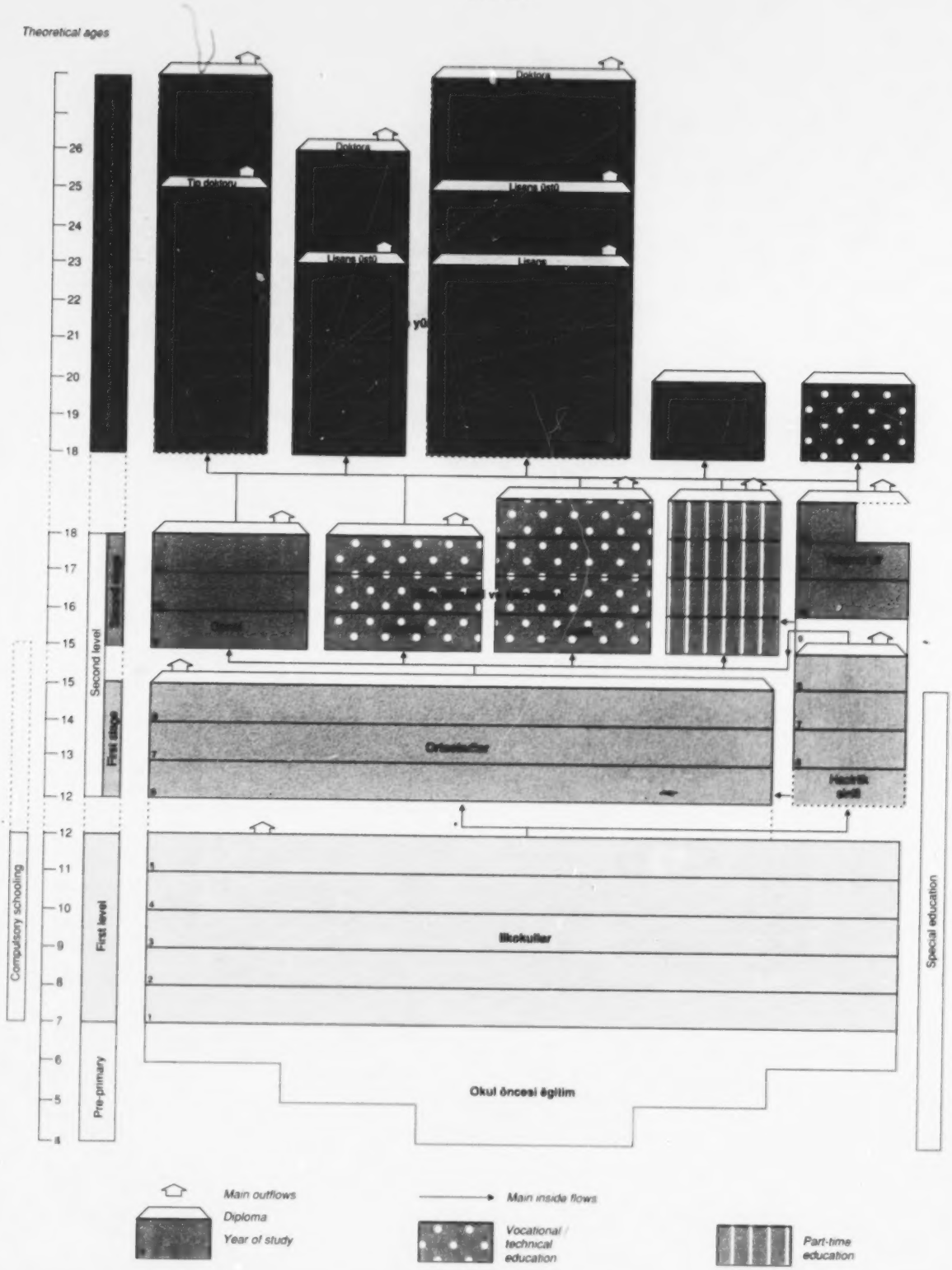
Programmes at upper secondary level giving access to post-secondary education are also provided through municipal adult education (KOMVUX) and folk high schools (Folkhögskolan). The minimum age for enrolment is 18 years.

SWITZERLAND



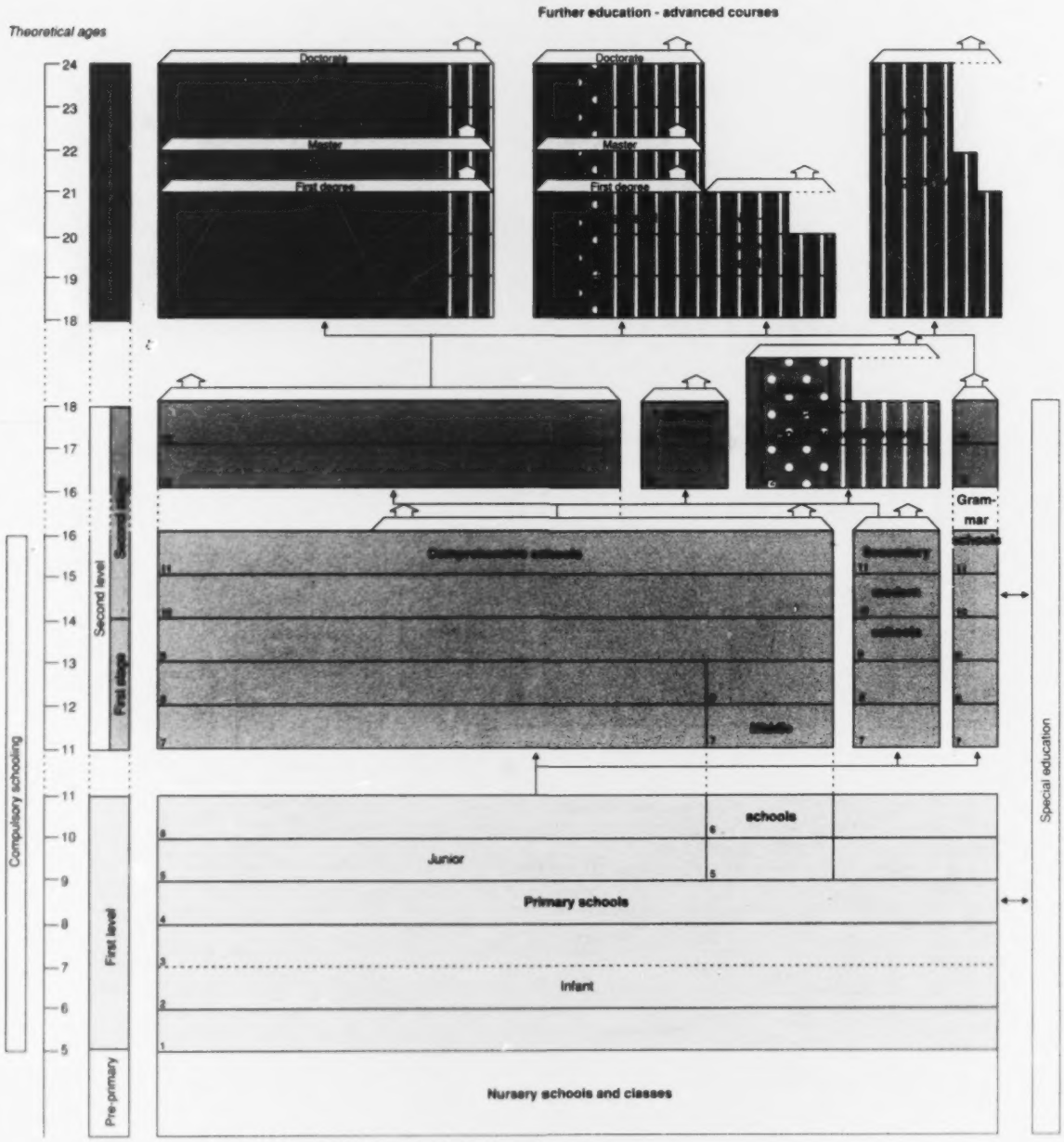
1. Work experience required.

TURKEY

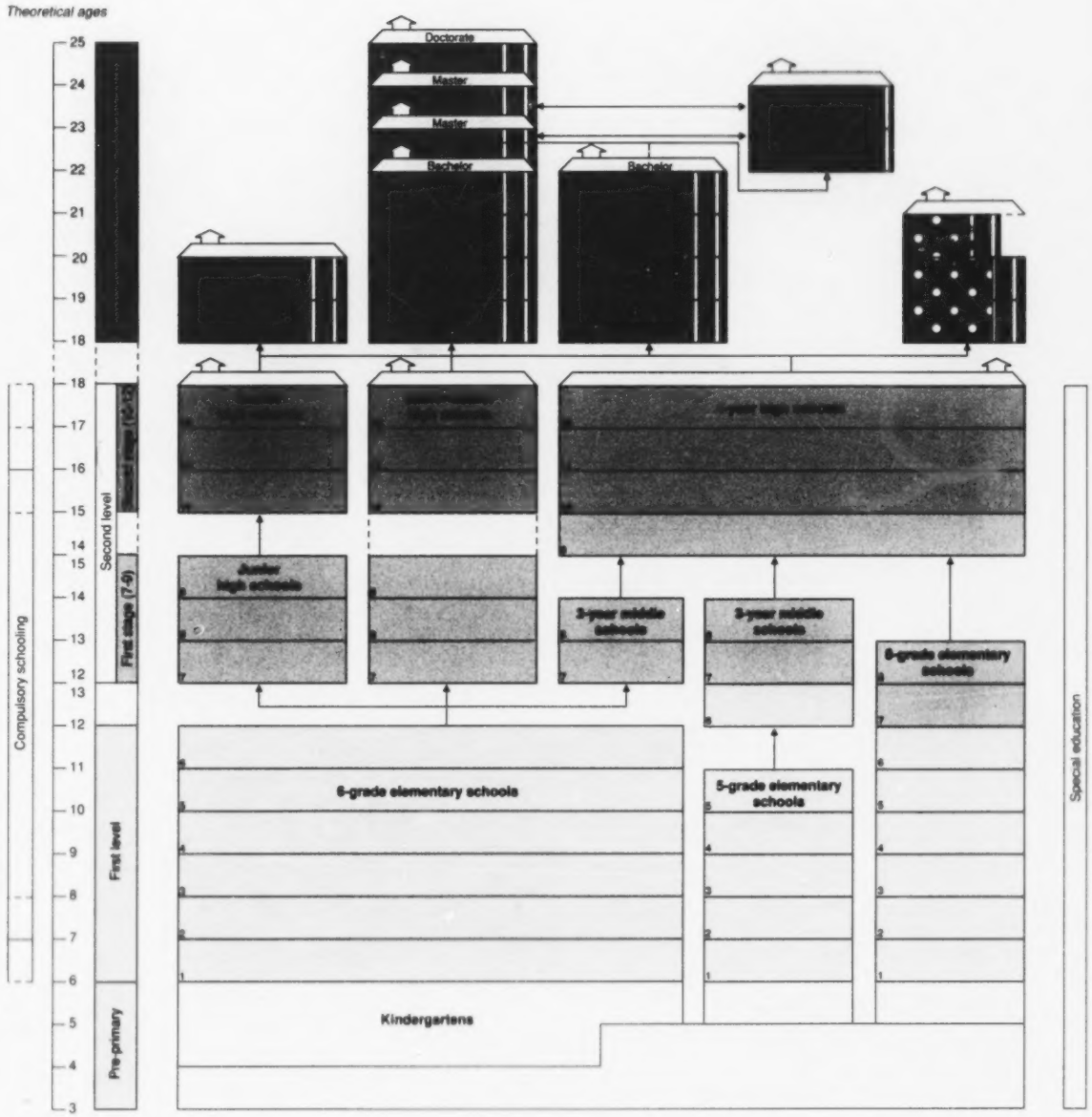

Theoretical ages
Doktora
Tıp doktoru
Lisans üstü
Lisans
Second level
First stage
First level
Pre-primary
Compulsory schooling
Special education
Okul öncesi eğitim
Main outflows
Diploma
Year of study
Main inside flows
Vocational / technical education
Part-time education

UNITED KINGDOM - ENGLAND AND WALES

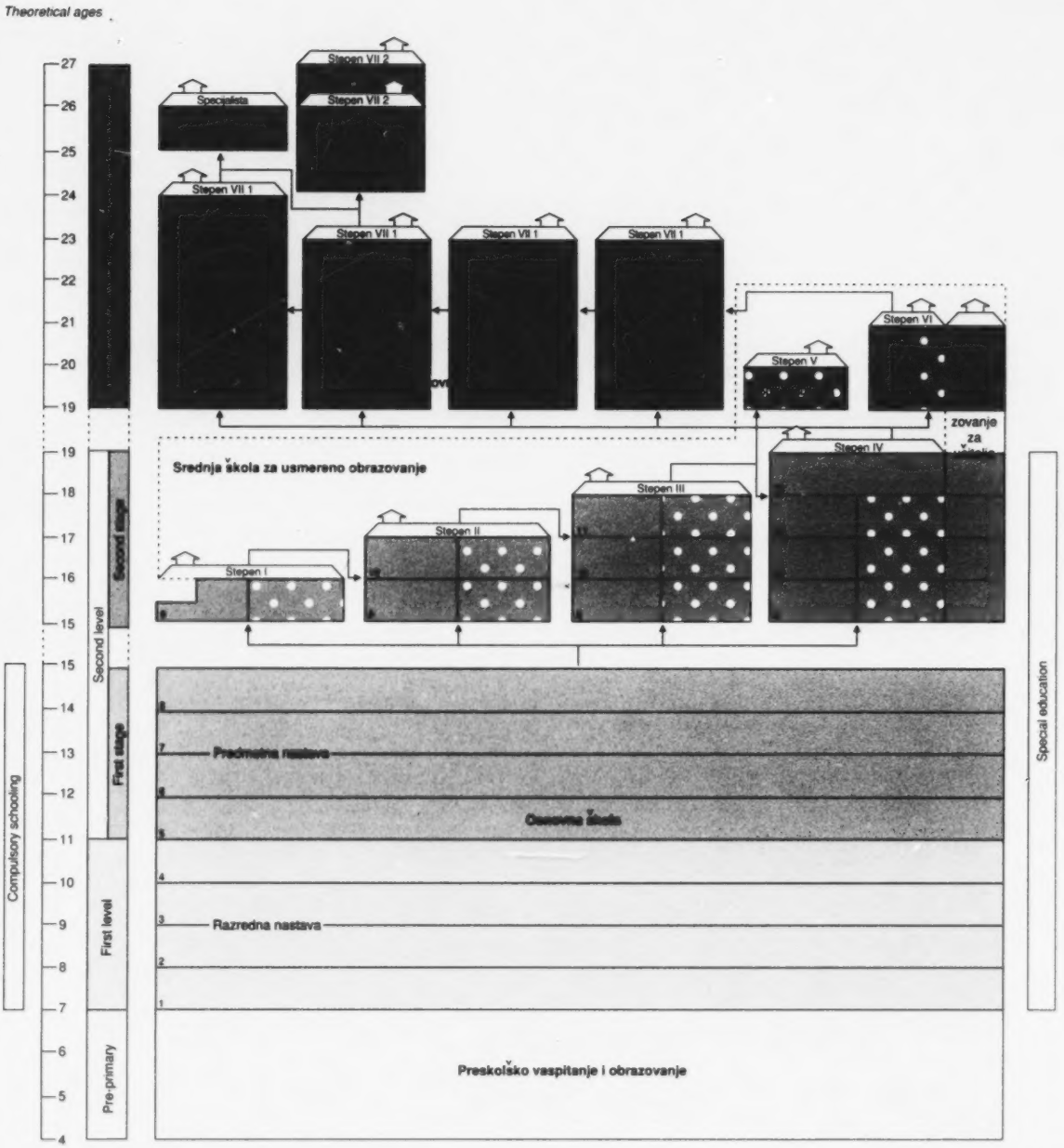
(The education system is somewhat different in Scotland and in Northern Ireland)



UNITED STATES



YUGOSLAVIA


Theoretical ages
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12
11
10
9
8
7
6
5
4
Specijalista
Stepen VII 2
Stepen VII 2
Stepen VII 1
Stepen VII 1
Stepen VII 1
Stepen VII 1
Stepen VI
Stepen V
Stepen IV
Stepen III
Stepen II
Stepen I
Srednja škola za usmereno obrazovanje
Predmetna nastava
Osnovna škola
Razredna nastava
Preskolsko vaspitanje i obrazovanje
Second level
Second stage
First stage
First level
Pre-primary
Compulsory schooling
Special education
Main outflows
Diploma
Year of study
Main inside flows
Vocational / technical education
Part-time education

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SUPPLEMENT

Education in OECD Countries 1987-88

HIGHER EDUCATION GRADUATES BY FIELD OF STUDY

1975 to 1986

PS 019507

OCDE
OECD
PARIS 1990

GRADUATES BY FIELD OF STUDY*

What we shall be looking at in this Supplement are the changes that have occurred during the reference period in the breakdown by field of study of those qualifying at the higher education level and compare the years 1975, 1980, and 1986.

The method that was used is factor analysis of correspondence (FAC) whereby the number of variables is reduced by means of principal axes or factors (characterised by rates of inertia, i.e. measures of the dispersion of the scatter along the axes) and elements and variables are interpreted with the aid of graphs and tables. The position of each element (the countries in this case) and each variable (the fields of study) depends on the behaviour of the other countries and fields of study. The contributions to the principal axes determine which are the most significant variables and elements. Those variables that the data reveal as having a low value, and thus limited explanatory power, have been omitted from the analysis. Accordingly, out of the 18 variables representing the fields of study only 11 have been retained. What should however be pointed out is the high proportion of graduates in Germany in the AUT category and in Japan in both MEN (particularly in the case of women) and ARC; these proportions remain stable over time.

Applying FAC to the total number of graduates

Once the low-value variables have been omitted and the ING variable has been incorporated in the PRO variable, those remaining account for over 70 per cent of the total for each of the three years.

Interpretation of the factorial axes

In the analysis hereunder we shall be looking solely at the factorial scheme formed by the first two factors which, for the three years, account for over 40 per cent of total inertia.

a) First axis: in 1975, looking at the contributions of the variables/elements to this axis, we find, in terms of fields of study, DRT, MED, LET and NAT on one side and SED, ING and COM on the other; and, in terms of countries, Austria, France, Greece, Italy, New Zealand and Switzerland on one side and Denmark, the Netherlands, Canada, Turkey, Australia, the United Kingdom, the United States, Japan, Norway and Yugoslavia on the other. Note the closeness of the points Netherlands/ING and New Zealand/AGR.

In 1980 this differentiation is less apparent: not only NAT, DRT and LET but also AMA and COM contrast with SED and, to a lesser extent, with MED. The positions of the countries are also slightly changed: although Austria, France and New Zealand retain the same position vis-à-vis Denmark, the Netherlands and Japan, the United Kingdom now contrasts with Sweden, Spain and Germany. Note the closeness of the points Japan/SOC, Spain/SED, Sweden/MED and, as in 1975, New Zealand/AGR.

In 1986 the differentiation is more marked than in 1980: aside from the traditional contrast between LET, DRT, NAT, AGR and SED, it will be seen that SOC contrasts with ING, AMA and MED. The position of the countries has also changed: Japan, New Zealand and Switzerland are on one side of the first axis and Sweden, Finland and Denmark on the other. Note the closeness of the points United States/COM, Japan/SOC, Sweden/(ING, MED) and United Kingdom/SOC.

* For ease of reading, use has been made of the following abbreviations for the fields of study:

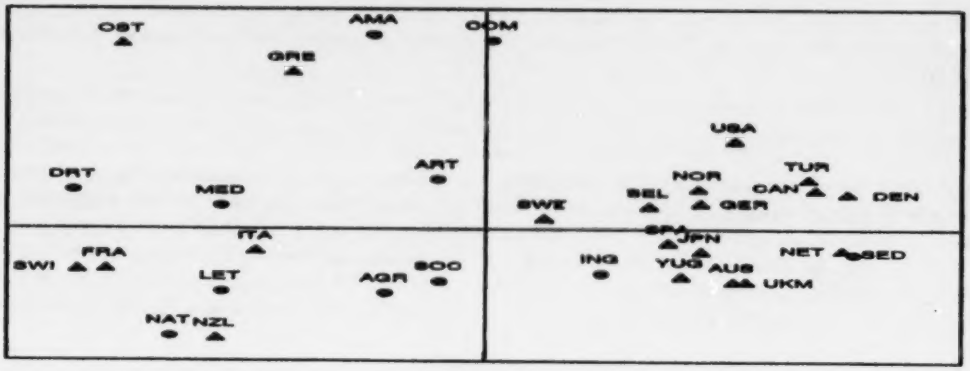
AGR	Agriculture, Forestry and Fishery	ING	Engineering
AMA	Mathematics and Computer Science	LET	Humanities, Religion, Theology
ARC	Architecture and Town Planning	MED	Medical Science and Health-related
ART	Fine and Applied Arts	MEN	Home Economics
AUT	Other and not specified	NAT	Natural Science
COM	Commercial and Business Administration	PRO	Trade, Craft and Industrial Programmes
DRT	Law	SED	Education Science and Teacher Training
FOT	Mass Communication, Documentation	SOC	Social and Behavioural Science
FTE	Service Trades	TRA	Transport and Communications

145

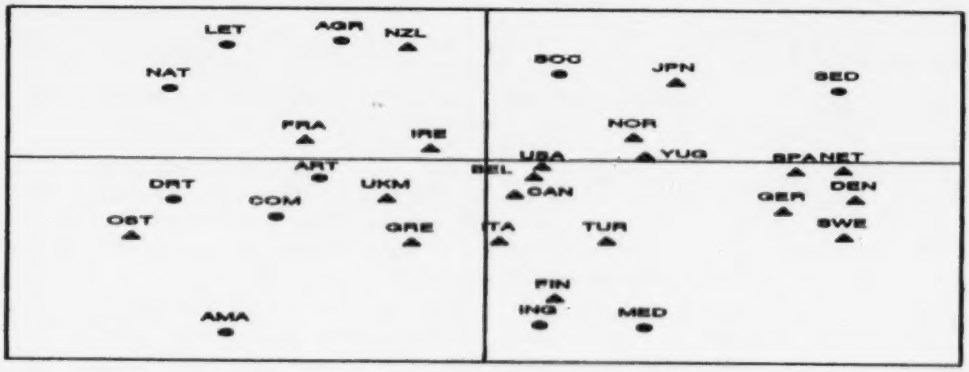
THIRD LEVEL GRADUATES BY FIELD OF STUDIES

A. Total, males and females

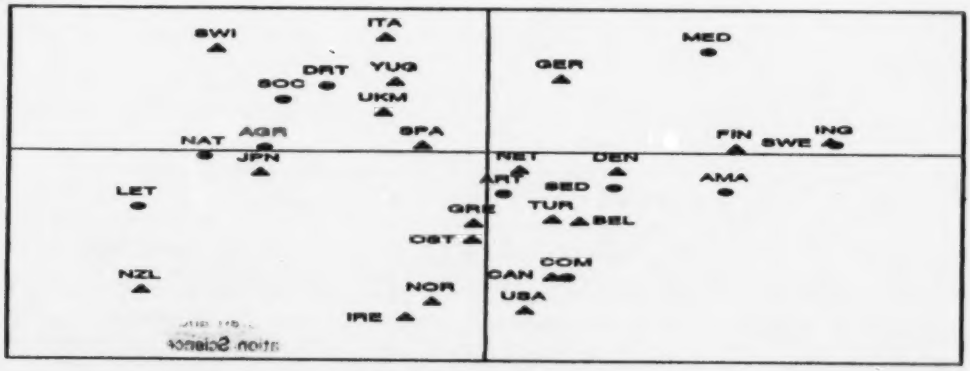
a) 1975



b) 1980



c) 1986



b) Second axis: this axis, where the proportion of inertia is equally large, throws some additional light on the changes revealed by the first axis.

Even in 1975 COM was already contrasting with the more traditional fields of study such as MED and DRT. COM had made still further gains by 1980 and by 1986 it was well ahead of the other disciplines.

The division between countries was as follows: in 1975, Austria and Greece on one side and New Zealand, United States, United Kingdom, Yugoslavia, Australia and Switzerland on the other; in 1980, Japan, New Zealand and Norway on one side and, Finland, Greece, Italy and Turkey on the other; in 1986, Ireland, United States, Norway, Canada and New Zealand on one side and Italy, Switzerland, Germany and the United Kingdom on the other.

This factorial scheme highlights the increasing importance of the SOC, COM, AMA, MED and ING disciplines in the breakdown for graduates in aggregate.

Application of FAC to graduates at the different ISCED levels

The above analysis highlighted the changes that have occurred in the distribution of graduates in aggregate. It is worth taking a brief look at the results of factor analyses of correspondence for levels 5 and 6 plus 7.

These new factor analyses have been carried out using the same variables as before; however FTE, which had been omitted from the total of graduates in view of its low value, has been combined with COM.

a) FAC for graduates at ISCED level 5

It should be noted that, among the variables omitted from the analysis for all countries, MEN accounts for a substantial proportion of level 5 graduates in Japan; in the case of Germany, only the variable MED stands out: it accounts for between 35 and 50 per cent of the total number of graduates.

The factorial scheme formed by the first two axes accounts for over 35 per cent of the proportion of total inertia and provides a good indication of the relations between disciplines and countries.

On the first axis, for example, the contrast in 1975 is between the variables LET, DRT and COM on one side and SED and ART on the other; in 1980 between DRT, COM and NAT, and SED and ART; in 1986 between COM, AMA, ING and MED, and SED and AGR. The relationships between countries in 1986 were as follows: Finland, Belgium, Ireland, Canada, Sweden and the United States on the one side and New Zealand on the other. Note the closeness of the points France/DRT (for the years available) and New Zealand/(AGR, SED).

The second axis reveals a twofold contrast in 1986: between LET and SED, SOC, DRT and AGR (left-hand side of the diagram) and between NAT and ART, and ING and MED (right-hand side).

b) FAC for graduates at ISCED levels 6 plus 7

Of the variables omitted, ARC is important in the case of Japan.

The first principal axis represents the contrast in 1986 between the variables DRT, MED, ING and LET on one side and SED and COM on the other. The second axis is characterised in particular by a relationship between MED, ING and COM, with AMA probably reflecting the introduction of new business and technical courses at levels 6 and 7. Note the closeness of the points United States, Canada/COM.

Application of FAC to the total number of women graduates

Of the variables that were omitted, MEN accounts for a high proportion of women graduates in Japan; the two other most popular disciplines in this country are SED and LET.

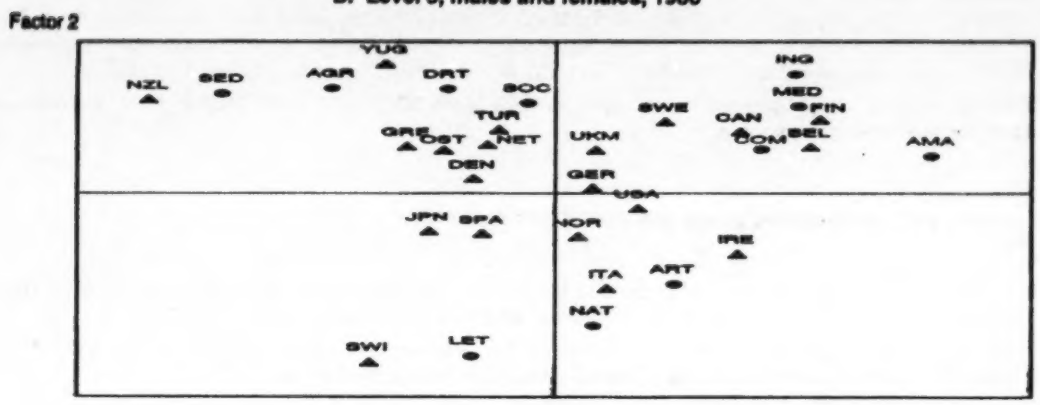
The factorial plane 1-2 represents over 40 per cent of total inertia and can therefore be used to interpret the axes from the point of view of the dispersion of the scatters of points about these axes.

The analysis reveals a constant factor as between the variables LET, DRT and NAT on one side of the first axis and SED and MED on the other. The second axis provides a clearer picture of the changes that have occurred in the breakdown of the qualifications obtained by women during the period in question.

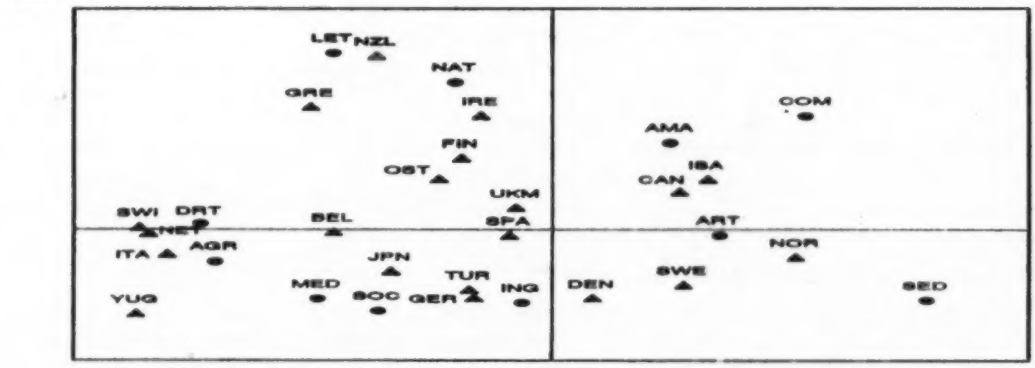
a) First axis: in 1975 the contrast is between LET and DRT, which are popular in countries such as France and Italy, and SED, MED and COM, which are popular in Turkey, Denmark, Norway, the Netherlands, Belgium and Portugal. In 1980 there are the same contrasts between the variables LET and DRT on one side and SED and MED on the other, added to which there is the NAT/SOC relationship. The countries fall into the following groups: France, Austria, Belgium

THIRD LEVEL GRADUATES BY FIELD OF STUDIES *(cont'd)*

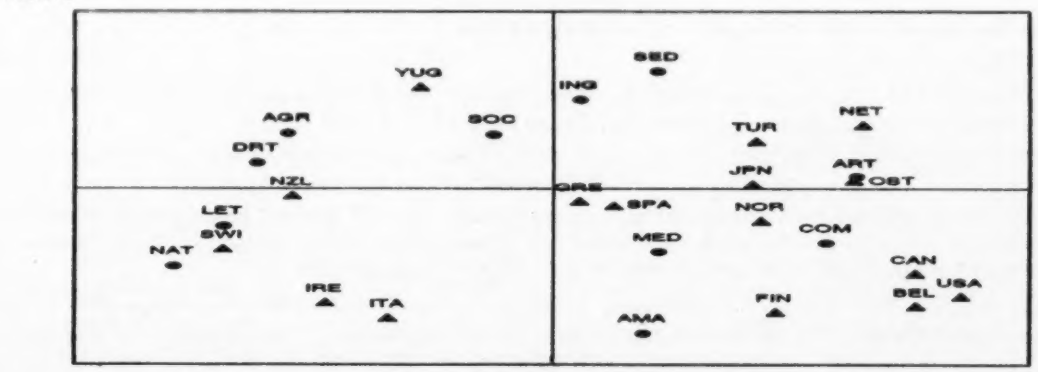
B. Level 5, males and females, 1986



C. Levels 6 and 7, 1986



D. Total, females, 1986



and Italy on one side and the Netherlands, Germany, Sweden and Spain on the other. In 1986 the contrast is between LET, DRT, NAT and AGR, and ART and COM, while Switzerland, New Zealand, Ireland, Italy and Yugoslavia are on the opposite side to the United States, Belgium and Canada.

b) **Second axis:** the contrasts in this case are as follows: in 1975, AGR and ART as against SOC, NAT and ING; in 1980, SED as against COM, AMA, ART and ING; in 1986, AMA, NAT, MED and COM as against ING, SED, AGR and SOC. The countries are grouped on either side of the principal axis as follows: in 1975, Yugoslavia, Greece, Japan, United States, Sweden, Spain and Italy on one side and Finland, Portugal, France and Turkey on the other; in 1980, New Zealand, Denmark, France, Belgium, Sweden and Spain on one side and Austria, Turkey, Greece, Canada, Finland and the United States on the other; in 1986, Italy, Finland, Belgium, United States and Canada on one side and Yugoslavia, Turkey and the Netherlands on the other. Note in particular the closeness of the variable/element pairings in the lower right-hand quadrant of the diagram.

This axis can be considered to highlight the weaker variables: in 1975 these are AGR, ART, SOC, NAT and ING; in 1980 AMA, ART and ING; and in 1986 AMA, NAT, ING and AGR. However, it above all brings out the new relationship that emerged in 1986 between MED and COM, and SED and SOC.

The changes that occurred in the breakdown of qualifications for women are far less pronounced than for the total. The traditional contrasts are still very marked, but the entry of women into new disciplines could radically alter the distribution of the qualifications they obtain.

This compendium, published annually, contains comparative statistics on education systems in all OECD countries.

This first part of this special edition analyses changes in education during the period 1975-1986. In the second part, statistical tables set out data on the 1987-88 school year, covering six major subject areas - pupils, teachers, students, enrolment rates, qualifications and expenditure. Organisation charts give details of each country's education system and make it easy to pinpoint similarities and differences.

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